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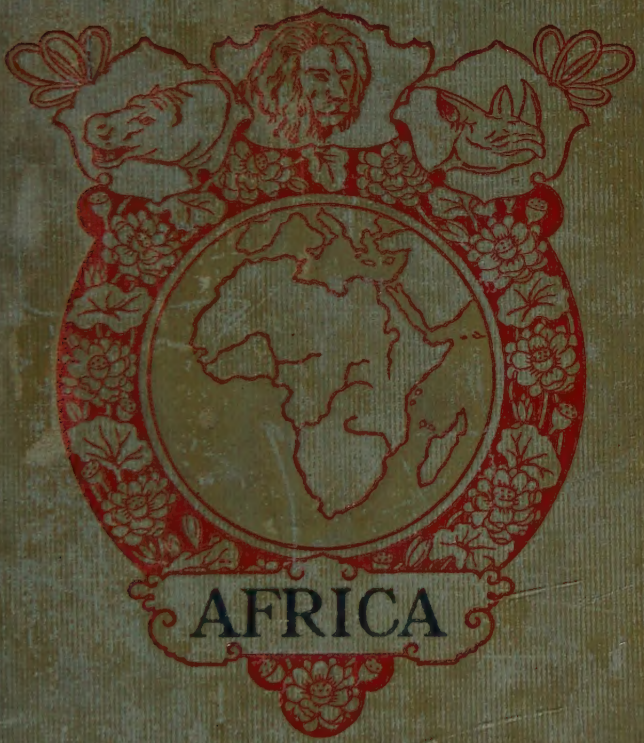

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CARPENTER'S GEOGRAPHICAL READER

AFRICA

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BY

FRANK G. CARPENTER

NEW YORK ·:· CINCINNATI ·:· CHICAGO
AMERICAN BOOK COMPANY

Carpenter's Geographical Readers

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ENTERED AT STATIONERS' HALL, LONDON.

CARPENTER'S AFRICA.

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PREFACE

THE purpose of this book is to give a simple knowledge of the peoples and countries of Africa as they are to-day. It is not intended as a geography, but merely to supplement and enliven the study of the geography text-book by being read in connection with it. The author takes the children on a personally conducted tour around and through the great African continent, the journey being one of exploration and study as well as of sight seeing.

The travelers cross the Atlantic Ocean from New York to the Strait of Gibraltar, and spend some time in the lands along the Mediterranean, visiting Morocco, Algeria, Tunis, and Tripoli. They go by caravan into the Desert of Sahara, stopping in the oases and learning about the life and trade of that region; and then make their way on to Egypt and far up the Nile into Nubia.

From Nubia they cross the country to the highlands of Abyssinia and go on down to the Indian Ocean, where they take ship for Mombasa in British East Africa.

By means of the railroad, which the English have built, they travel between Mount Kenia and Kilimanjaro to Lake Victoria, and explore the great Rift valley, learning about its people, animals, and plants.

Their next trip is across the Sudan to Lake Tchad, and thence over Hausa Land and by the Upper Niger to Timbuktu, and on through the French territories of Senegal

to the Atlantic Ocean; from there they visit the Spanish possessions farther north.

Senegambia, Sierra Leone, Liberia, and the countries along the Gulf of Guinea, which form the true home of the negro, are next seen, and then a long journey is made up the Kongo and across country to Lake Tanganyika and German East Africa.

From Dar-es-Salaam, the capital of German East Africa, a short visit is paid to the Island of Zanzibar, which is under the protection of Great Britain, after which the Portuguese possessions on the east coast are visited and their people described.

The basin of the Zambezi is next taken up; and then comes the new world of British South Africa, with its stock farms, gold fields, diamond mines, and other industries, showing how a white civilized people has grown up in the southern end of the black continent.

After visiting Natal, the Garden of South Africa, the steamer takes the children to Cape Town, and from there on up the western coast of the continent, calling at the ports of German Southwest Africa and Angola, the west African Portuguese possession, completing the tour.

Much of the book is the result of the personal observations of the author, who has traveled through some of the countries described. Other parts are based upon the best authorities of recent African exploration, and effort has been made to verify such information as far as possible.

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AFRICA

1. FROM NEW YORK TO GIBRALTAR

FOR the next few months we are to travel together in Africa. We have already started and are now sitting on the deck of a great ocean steamer as it moves toward the east. We left our homes some days ago and sailed

"We . . . sailed out through the harbor of New York, . . ."

out through the harbor of New York, past Staten Island, and on into the Atlantic. We said good-by to our friends at the wharves, wiping the tears from our eyes as we did so, and waving our handkerchiefs as long as we could see.

The first day or so was spent in getting over our seasickness, and we are now thoroughly enjoying life on the ocean. We have become used to the steamer and have explored every part of it, from the bridge, where the captain stands, down to the furnaces near the keel, where, day and night, sooty-faced, brawny-armed men are shoveling in coal. We chat with the officers and sailors, run races over the deck, and play all sorts of games such as quoits and shovelboard. Part of the time we hang over the rail, watching the blue waters of the Atlantic Ocean churned to white foam as we plow our way through them; or stand at the prow, looking toward Africa, which is to be our home for months to come. We spend hours upon deck in steamer chairs, studying books and maps from the ship's library to get some idea of the country and to plan out our tour.

It is a great undertaking that we have before us. Africa is, with the exception of Asia, the largest of the earth's grand divisions. It is three times the size of Europe, more than half again as large as South America, nearly one fourth larger than North America, and about three times as large as the United States, including Alaska and our outlying islands. Africa contains more than one fifth of all the land upon earth.

Let us take a look at the African continent as it lies on the map. Notice its simple formation. It has but few bays, no long peninsulas, and no arms of the sea running far into the land. If we could view it as the sun sees it, we should observe that it consists of a vast plateau of irregular shape with ranges of mountains about the edges. This makes the interior difficult of access from the sea,

especially as there is a strip of lowland between the coast and the plateau, which is so malarial that those who cross it are sure to have fever.

Africa has mighty rivers, but most of them have rocky cataracts where they break through the mountains and are hence unnavigable by vessels from the sea. It is partly on this account that the continent has remained so long unexplored by white men, although it lies so near Europe.

Looking again at Africa, through the eye of the sun, we observe that it is the hottest of the chief land divisions. The Equator runs through its center, and heat waves are always dancing upon most parts of it. Moreover, in the north is the Desert of Sahara (sȧ-hä′ra), as large as the United States; and in the far south is another desert, Kalahari (kä-lä-hä′rē), not nearly so large but almost as dry. Two fifths of Africa is arid or covered with scrubby bushes. The remainder is high, grassy plains and dense, dark forests through which we might travel for miles and miles without a glimpse of the sun. There are also a few large tracts of cultivated land.

Our journey will by no means be an easy one. Africa has but few railroads, and our travels will be chiefly in boats, on foot, on horseback, on camel back, and in chairs and litters carried on the shoulders of men.

We have our guns with us. Most of Africa is inhabited by savages, some of whom are cannibals; and its wilds are the homes of lions, panthers, leopards, and the terrible gorilla, a fierce ape as tall as a man and much stronger. It has elephants, giraffes, antelopes, buffaloes, and ostriches; its rivers are full of crocodiles, and the rhinoceros and hippopotamus are found in the woods and swamps.

Africa is known as the Dark Continent. It is the land of the dark-skinned races, and especially of the woolly-haired negro. In the northern parts, north of the Sahara, the natives are more like Europeans or Asiatics. Many of them are Arabs, the descendants of men who conquered these regions ages ago; they have brown or sallow faces, straight noses, and features like ours.

South of the Sahara, where most of the population is, the natives are nearly all negroes. They are of many languages and many tribes; some are tall, well formed, and fine looking, and others pygmies or dwarfs; some are savage, and some almost civilized. In the extreme south there are many Europeans, chiefly English and Boers. All together Africa is supposed to have two hundred million inhabitants; but they are very unevenly distributed, some tracts having no people whatever.

For ages this continent has been in a savage state. Its tribes have been warring upon, enslaving, and in some cases eating one another; and in most parts of the continent there has been continual war. Within the past few years, however, the great powers of Europe have taken possession of Africa, and almost the whole continent is now ruled by them. Each power has an army in its territory to keep peace, and is also developing the country and its trade. In many places roads and railroads are building, so that in time it will be possible to travel through Africa almost as well as at home.

At present the British have more African territory than any other European people. They control tracts larger than all Europe, their colonies being scattered over the whole continent, and especially throughout the southern,

western, and central portions. Egypt with the country just south of it is a dependency of Great Britain.

The French rank next to the British among the foreign landowners, their territories being as large as the main body of the United States. They govern Algeria, Tunis, most of the western part of the Sahara, and much of the Sudan (sōō-dän′) south of it.

The Belgian possessions lie along the Kongo in central Africa, and the Germans and Portuguese have colonies on the eastern and western sides of the continent. The Turks rule parts of the Sahara and Tripoli (trĭp′o-lĭ), and the Spanish have minor dependencies. We shall learn, however, as we travel over the country, just what each nation has, and shall see that in most places the natives are better off than when they governed themselves.

The tourist's life upon shipboard is a lazy one, and our eyes leave our books again and again to look at the waves as they roll on and on until lost in the sky in the distance. It grows warmer as we steam eastward. Now schools of flying fish flash like silver arrows as they dart from wave to wave, now porpoises race along side by side with the steamer, rising and falling as though playing leap frog, and now a huge whale spouts up a geyser of water away off at the right or left.

As we approach the coast of southern Europe, sea gulls by the score come out and follow the ship, swooping down at times for the scraps of food thrown overboard. We pass through the Azores, a group of fertile volcanic islands, and a little later sight the red cliffs of Cape St. Vincent on the Portugal coast. We have our first glimpse of the African mountains as we enter the Strait of Gibraltar, and

". . . we come to anchor in Gibraltar Bay . . ."

as we come to anchor in Gibraltar Bay under the frowning guns of the British fortifications, Africa is in plain view over the way.

2. MOROCCO

BEFORE we cross the Strait of Gibraltar let us take a look at the northwestern part of the African continent. This region is so different from the others that it has its own name. It is sometimes called Little Africa, and the Arab geographers knew it as "The Western Island." In many respects it is like an island. It is the region of the Atlas Mountains, surrounded on the west and north by the Atlantic Ocean and the Mediterranean, and on the south and east by that sea of sand, known as the Desert of Sahara.

The country inside these boundaries is of enormous extent. It is longer than the distance from New York to Omaha, and its average width is greater than the distance from Washington to New York. It comprises Morocco, Algeria, and Tunis, has an area as great as our Atlantic States, and supports millions of people.

This Atlas region is wildly mountainous; some of its peaks rise as high as the highest of the Rockies. It has skies as blue as those of Colorado, and the face of the country resembles New Mexico and Arizona. Some of it is dry and barren, other parts are well watered by nature, and others have been made fertile by irrigation.

The country is beautiful. The mountains are covered with forests; the valleys produce the same fruits and grains as southern Europe, and everywhere are great beds of daisies, buttercups, daffodils, and irises. The climate is excellent and suited to our race.

The natives of this part of Africa belong to the same race as we do. They are chiefly Berbers or Kabyles (kā-bēls′), Caucasian tribes which have lived here for ages. Many of them have fair complexions, rosy cheeks, blue eyes, and light-colored hair. Other natives, such as the Moors or Arabs, are the descendants of the Mohammedan warriors who conquered northern Africa centuries ago, and who are still the ruling classes throughout the country. They are darker than the Berbers, but their features are similar to ours. The Moors are found mostly in the towns and lowlands. There are Jews in the cities, and many negroes who were brought across the Desert of Sahara to be used as slaves.

We shall learn more about the people as we travel among

them. Our first trip is to be through Morocco, just over the way. We take a little steamer and within three hours have crossed the Strait of Gibraltar from Europe to Africa, and have anchored in the port of Tangier (tăn-jēr′). We are in a new world. The bay where we lie is surrounded by hills, at the foot of which is a little white city with great white walls about it. Those towers, which rise here and there above the rest of the buildings, are the minarets of the Mohammedan churches or mosques, where the priests are calling the people to prayers. That tree which rises high above the flat roofs is a date palm, and the big building at this end is the citadel, while farther over is the kasbah, or home of the governor of the province.

"We are in a new world."

What an odd city! Its square houses, with their flat roofs, look like gigantic goods boxes jumbled together along narrow streets without regular order.

Notice the swarthy, brown-skinned men in turbans and gowns who are coming on board. They are hotel porters. You can see their names on their turbans. Each sings out the virtues of his own establishment as he seizes our baggage and begs us to follow. We push the crowd back

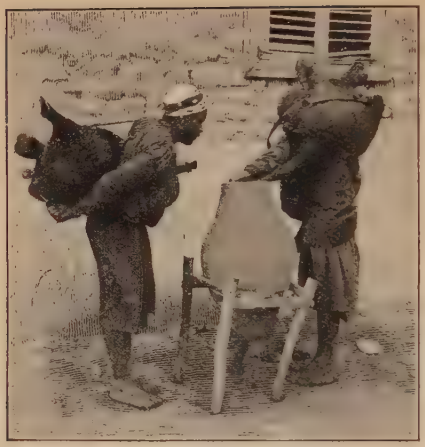
and make our own choice, and then go to the shore, where our baggage is examined by dark-faced officers in turbans and gowns.

We next take donkeys and ride to the hotel, passing through the gate in the wall. We go slowly, guiding our little beasts this way and that to keep out of the way of other donkeys loaded with goods or ridden by men. Now a mule passes, and now we are overshadowed by camels moving along. The streets are narrow, and we are often crowded close to the wall. There are no carts, and all freight is carried on donkeys and camels.

The people are as strange as the animals. The crowd reminds us of a sheet-and-pillow-case party or a great masquerade. We are jostled by dark-faced Moors in burnouses, long cloaks with hoods which cover the head, showing only the face and beard. Others have turbans and white gowns, and some wear the red fez caps of Morocco and the black clothes of Europe. Many are barefooted; others have slippers of bright yellow and red with soles so thin that they make little noise on the cobble-stone roadway.

See those sallow-faced men in caps and long coats bound in at the waist with bright-colored sashes. They are Jews. We shall meet thousands of them in Morocco. They do most of the banking and trading, and many of them are rich. They are despised by the Moors and, in some cities, live in a quarter off by themselves.

Look out for that water carrier or he will sprinkle you as he goes by. I mean that man with the fat, black bag of goatskin on his back. All the water of Tangier is carried either that way or in jars. It comes from the



"Look out for that water carrier . . ."

springs and wells; it is sold throughout the city, water carrying being a regular trade.

What are those odd figures coming up street? They look like white bedticks tied in at the top, walking on feet. They are Moorish women who, by Mohammedan custom, must keep their faces hidden from all men but their husbands. See that girl at the right. She has pulled her head cloth to one side and holds it there, peeping out through the crack.

What is the singing in this side street at the left? That is a class of Arab children learning their lessons. We follow the sound and peep in. A half-dozen dark-faced boys in caps and gowns are sitting on the floor of a room upon cushions before little low desks. Each has a book in his hand,

"Each has a book in his hand . . ."

and all are singing out the verses of the Koran or Mohammedan Bible, which they are trying to learn. The black-bearded man in the white turban is the teacher. He has a little rod to keep his pupils in order and looks rather fierce. Those shoes near the door belong to the children. They take off their shoes while in school, although they keep their caps on. There are many such schools in Morocco; and in Fez, the capital, are universities which are noted all over northern Africa.

Leaving the school, we go on to the hotel, where we have dinner served much as at home, save that our waiters are little Arabs in slippers, wearing turbans and gowns. Later we visit the bazaars and then go outside the walls to the market, where all sorts of goods are sold.

What a curious place! It is like a great gypsy encampment. There are little tents scattered over the fields, and amongst them are men, women, and children sitting on the ground or moving about, or standing in groups laughing and chatting, buying and selling. Here two are quarreling, there one is pulling a donkey away from another, and farther over are three long-gowned Arabs loading their camels for a caravan trip across the desert. The ungainly beasts are down on their knees, and they groan and shed tears as each new burden is added.

That black-faced Moor, with the crowd about him, is a professional story-teller, the boy beyond him is peddling lemonade, and those two well-dressed men coming this way are merchants buying goods for shipment abroad. There are many women, some with veils and some with bare faces; and all together such a variety of strange sights that we can not comprehend them all.

And then the animals, and especially the camels and donkeys! They are everywhere. We must look out for the camels. They are treacherous beasts and may bite us as they pass. We stop at the stand of a fruit peddler and buy figs, oranges, and dates. We watch the men selling wool and grain; and talk through our guides with some soldiers who have come in from the country.

After this we look up horses and mules for our trip to Fez, the northern capital of Morocco, which lies in the interior about ten days from Tangier. We try horse after horse to get the best riding animals, and pick out the largest of the mules to carry our baggage.

3. THROUGH INTERIOR MOROCCO

WE have left Tangier and are traveling on horseback through the land of Morocco. We have an escort of Moorish soldiers, furnished by the Sultan, to protect us from the wilder tribes, and quite a caravan of pack mules to carry our baggage, including the tents in which we shall rest at noon and at night. Our servants are dark-faced Arabs in burnouses, and our soldiers carry long guns and look fierce. The men with the tents usually start first, and when we reach the camping places the tents are already up and our meals are prepared. We have plenty of canned food with us, and we buy fresh fruits, chickens, eggs, and milk at the villages and towns on the way. Our animals are fastened at night by tying their fore feet together with a long rope, which is secured to a peg driven into the ground. We start early each morning and walk, gallop, or trot, as we please, on the way.

The trail changes from time to time. Now we are in the mountains where the fierce Berbers live; they stare at us and evidently despise us because we are Christians. Now we are on the plains in the farm villages of the Arabs, and now in towns somewhat like Tangier, where the chief people are Moors.

Northern Africa.

How delightful it is! The sky is bright blue, and the air from the Atlas Mountains, whose highest peaks are now covered with snow, is pure and bracing. There are no roads in Morocco, only caravan tracks and bridle paths, and our way is right through the fields. Much of the land is rich, and we ride for miles through crops of green barley, wheat, millet, and corn, now going over a plain spotted with daisies, daffodils, buttercups, and irises, and now through valleys where there are beautiful ferns and palmetto trees. We see many fig orchards, surrounded by prickly pear hedges, and groves of dark green olive trees loaded with fruit. Farther up in the mountains are vineyards, and lemon trees and orange trees. There are

also forests of walnut trees and of the evergreen oaks whose bark is used for corks throughout the world.

At times a great stork flies over us, and again a flock of crows or an eagle. The air is filled with buzzing beetles and other insects. We catch butterflies when we camp, and gather wild flowers to press and send home to our friends. Ripe dates and figs are brought us fresh from the trees, and we stop at an orange orchard and pick some of the fruit.

At one place we visit a large fruit farm and see figs prepared for export to the United States and Europe. When the figs are dead ripe, they are gathered and laid upon boards in the sun to dry. When dry they are pressed into shape one by one, and then packed in boxes or mats for shipment abroad.

Morocco has many delicious figs; some kinds are white, some black, some purple, and others yellow or green. The purple figs are among the best, although the yellow ones are more beautiful.

Fig trees are raised from seeds. The sprouts are transplanted in rows so that they stand sixteen or more feet apart. They begin to yield fruit at three years, and some varieties will produce two crops a year for centuries. Figs are grown in different parts of northern Africa, in Spain, Portugal, Greece, and other countries upon the Mediterranean Sea, and also in California. There are all together more than three hundred varieties of this fruit.

Another valuable product of Morocco is the olive. We see olive orchards almost everywhere, and watch the dark-skinned people gathering the fruit and pickling it or pressing it to make olive oil. Olives when first picked look

much like blue or green plums. The trees are set out not far apart and are carefully cultivated. At about the eighth year after planting they come into bearing, after which they will bear for a hundred years or more. For this reason it is said that the man who sets out an olive orchard lays up an inheritance for his children's children. Some trees will yield forty gallons, and some even one

"We pass camels . . . loaded with grass . . ."

hundred gallons of olives in one year. The fruit for pickling is gathered comparatively green ; that for oil remains on the tree until dead ripe. In making oil, the olives are spread on a floor of glazed tiles to let the water in them run off. After this they are pressed, yielding an oil which is the olive oil of commerce.

Going onward we see strange things at every step. We pass camels so loaded with grass that they look like hay

stacks on legs. There are many men in turbans and gowns, and women with covered faces like those of Tangier. The people riding the camels bob up and down as the huge beasts swing themselves over the roads, and those upon donkeys have their bare feet almost touching the ground as their little beasts patter along. Now a turbaned Arab calls out to us, "Aleikoom salaam," which means "Peace be with you." Our guide tells us how to reply, and we cry out as we bow, "Salaam aleikoom," "With you be peace."

Some of the natives, however, are by no means so friendly, and, were it not for our guard from the Sultan, we might have to fight. Now and then a company of fierce-looking Arabs with long guns in their hands dashes by upon horseback. They are Mohammedans and are unfriendly to Christians.

We pass through many villages of rude huts made of stone, mud, or straw. Each house has a wall or hedge of cactus about it; many have dogs which bark at our horses as we ride by. Some of the villages are high up on the hills and some are on the plains. Many are partly composed of tents, and some are all tents arranged in circles or squares. The tents are the homes of shepherds who are pasturing their flocks, moving on as the grass fails. The shepherds wear hoods and long cloaks. We hear them singing as they tend their sheep in the fields. There are goats everywhere; they are reared for their wool and skins.

Now and then we cross brooks, creeks, or little rivers; and at such places always find the people using the water to irrigate the fields. They raise it to the higher levels

by two wheels set at right angles to each other, moving in cogs and connected with a third wheel, which has clay jars tied to its rim. This last wheel is so set that, as it turns, the jars dip into the water and fill. As the jars come to the top they empty into a trough which leads out to the fields. The motive power is usually a blindfolded ox, camel, or mule.

"... the jars ... empty into a trough ..."

The farming of Morocco is everywhere rude. The plows have but one handle. They are often little more than crooked sticks shod with iron, which scratch the surface of the ground. The farmers are poor; they are heavily taxed, the officials of the Sultan leaving them little more than enough to support life.

Going farther south we cross the Sebu (sā-bo͞o′) River, and a little later find ourselves on the green plain of Fez. We make our way over a country covered with palmetto trees and coarse grass, now passing through beautiful wild flowers and rich crops, until at last, away off in the distance, we see a white city. It turns gray as we near it,

and we perceive a gray wall with towers upon it. The domes and minarets of mosques rise high above the wall, and we are told that we are in sight of Fez, the chief city of Morocco, and the home of the Sultan for a part of each year. It lies about one hundred miles back from the Atlantic Ocean, in a pear-shaped valley surrounded by hills on which are orchards of orange, pomegranate, olive, and apricot trees.

". . . we perceive a gray wall . . ."

We meet more and more people as we come closer. There are tents outside the walls, and caravans of camels and donkeys going back and forth over the road. Aided by the escort of the Sultan we pass through the crowd and enter the gates. We are at last in Fez, the capital of Morocco.

4. IN FEZ, THE CAPITAL OF MOROCCO

THE empire of Morocco is larger than any one of our States except Texas. It has several million inhabitants, most of whom live in villages and desert encampments. There are but few cities. The largest is Fez, which is about the size of Indianapolis, and next to it is the town of Morocco, which lies south of it. Mekinez (měk′ĭ-nĕz), to the westward, is still smaller. After Mekinez come the chief ports, scattered along the Atlantic coast, embracing Tangier, Casablanca (cä-sȧ-blän′kȧ) or Dar el Beida (bā′dȧ), Mazagan (mȧ-zȧ-gän′), and Mogador (mŏg-ȧ-dōr′).

The port towns are much like Tangier. Each has a mosque or so, a collection of flat-roofed, bright-colored buildings, and a market. The streets are narrow and dirty, and thronged with dark-skinned people in Moorish costumes.

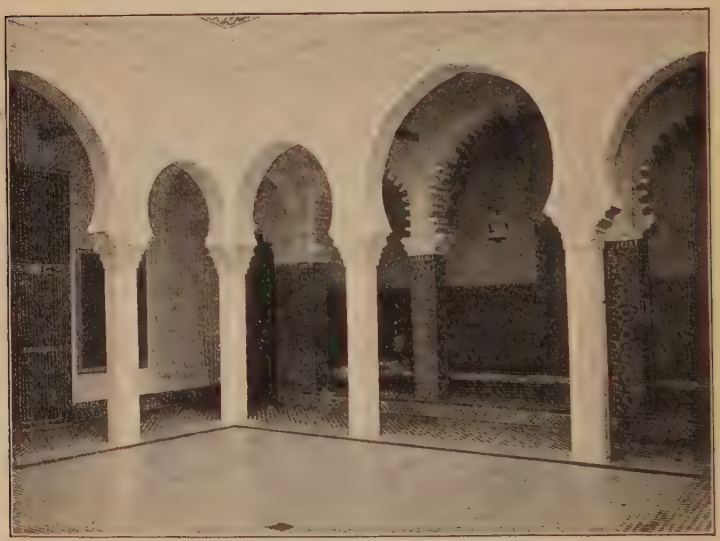
The trade to and from the ports is chiefly by camels or mules, which cross the desert in great caravans to the oases and even to the tropical lands south of the Sahara, known as the Sudan. Camels are the only animals which can travel long distances without water, and they are extensively used for such journeys. In the mountains, donkeys, horses, and mules take their places.

The chief goods brought into Morocco by sea are cottons, sugar, and tea; and those sent away are the skins of sheep and goats, the hides of cattle, and also wool, wax, olive oil, almonds, and eggs.

But suppose we begin our exploration of Fez. We have hired a house in the city for our stay. We have it all to

ourselves with the exception of the turbaned, long-gowned, black-skinned servants, who bring in our meals and take care of our beds.

The house has blank white walls facing the street. Entering, we come into a court paved with tiles and lighted by a lantern of bright-colored glass. The court



"The court is surrounded by spacious rooms, . . ."

is surrounded by spacious rooms, each of which has a low ledge running about the wall, which serves as sofa and chairs. We are expected to sit cross-legged, and do so for a time, but it is tiresome and we soon hang our legs down. In the bedrooms there are wider ledges, upon which we sleep at night.

The house is by no means uncomfortable. The floors are of stone and are carpeted with beautiful rugs. The

high ceilings make the rooms cool, and there is a fretwork of wood above each door for air.

In the evening we go upon the roof to sit or walk about. The roof is flat; it has a little wall around it, on which we could stand to get a view of the city were it not impolite to do so. The tops of Moorish houses are the evening lounging places of the ladies, and, according to Mohammedan custom, it would not be proper for us to look at them. We can see, however, that all Fez is flat-roofed. The common buildings are uniformly low, and the few which rise high above the rest are mosques, which have great domes and minarets cutting the sky.

Inside the walls of our house is a garden, where there are palm, orange, and lemon trees, tropical plants, and beautiful flowers. It is delightful, and we feel that Moorish life is not so bad after all.

We spend day after day strolling the streets. How crowded they are! The donkey riders and burden bearers are always calling to the others to keep out of their way. The streets are so narrow that we have to jump from one side to the other. We are careful not to offend any one; for Fez is a Mohammedan city, and many of its people do not like Christians.

We walk by the mosques without going in. The Moors do not welcome unbelievers inside their churches, and we are content with what we can see through the doors. There are many worshipers; some on their knees and some rising and falling and bowing their heads to the floor, praying in the Mohammedan way.

Outside in the courts are fountains, where turbaned, long-gowned men are washing themselves before going in.

The Mohammedan always washes himself before he prays, and if he is out on the desert where he can not get water he rubs his hands and face with sand. Every good Mohammedan prays five times a day. That man away

". . . praying in the Mohammedan way."

up there on the gallery of the minaret is calling the people to prayers. His words are in Arabic, but the guide tells us what they mean. He is saying: "Come to prayer! Come to prayer! Prayer is better than sleep. Come to prayer!"

We visit the famous university for which Fez is noted. It has now seven hundred pupils and forty professors. In addition the city has fourteen colleges and many small schools. For more than a thousand years Fez has been famous for its schools of learning. The teaching, however, relates chiefly to the Koran, the Mohammedan Bible, leaving out almost everything we consider essential to a good education.

Let us go to the bazaars. The business streets are

roofed with matting or grapevines, and we can stroll along out of the sun. It seems almost twilight, although we had the glare of a tropical midday outside. The street is narrow, and facing it are boxlike stores, most of which are little more than holes in the walls. In each box a mer-

"In each box a merchant sits or stands . . ."

chant sits or stands, with his goods piled around him or hung upon racks overhead. Each man has his own kind of wares. Some are selling perfumery, some rugs, some spices, and others the beautiful things in leather for which Morocco is famous. There are shoe stores and grocery

stores, cook shops where they are broiling meat upon iron skewers over basins of charcoal, sweetmeat shops where candies and dried fruits are kept, and other places where we buy delicious fresh dates and figs.

We watch men working at their trades in the shops. Here they are weaving silk, and there making the red Fez caps, which are worn in Morocco as well as in Turkey and Egypt. In a side street we see boys embroidering red leather slippers, and across the way are smiths hammering at jewelry of silver and gold.

The customers are equally strange. There are Berbers from the mountains and fierce Arabs who have come from the desert; there are sheeted Moorish women peeping out through cracks in their cloaks, and with them jet-black negro slaves waiting to take home their purchases; there are sober-faced boys and bearded men in burnouses, all bargaining to buy as cheaply as they can. The prices are not fixed, and the merchant takes less than the sum he first asks.

During our stay we see the Sultan as he rides through the city on horseback. He has soldiers with him and goes about in great state. He is not only Emperor of Morocco, but also the head of the Mohammedan religion in this part of the world. He has absolute power over his people and can punish them as he pleases. Some of the punishments are cruel, and the government is a barbarous one.

In our country taxes are fixed by Congress, the State Legislatures, and the local governments; and the money collected is used for schools, roads, post offices, the police, and other things for the good of the people. In Morocco the Sultan himself fixes the taxes and spends the money

just as he pleases. He has his officers in every district, and even in many of the wandering tribes of the mountains and desert. A few tribes claim to be independent, and will not pay taxes unless compelled to do so.

The Sultan keeps an army of twenty or thirty thousand men to enforce his commands, and much of the tax money goes to them. The greater part of the remainder is spent upon the court or stored away in the treasury of the Sultan, so that there is nothing left for improving the country. As a result of this, the cities of Morocco have neither gas works nor water works. There are no roads, no railroads, no public school system. The land, though rich in natural resources, is but little developed, and the people are poor.

5. ALGERIA. GENERAL VIEW

WE have left Fez and ridden on our horses back to the Strait of Gibraltar. There we took passage on a ship and we have come about two hundred miles eastward to Algeria (al-jē′rĭ-ȧ), the great country adjoining Morocco belonging to France. We are now in the most important of all the French colonies. Algeria is often called African France, although it is not the only territory the French have on this continent. They control Tunis on the east, much of the Sahara on the south, and parts of the Sudan and the other countries beyond.

Algeria is equal to five States as large as Pennsylvania, and it would cover the whole of France, if it could be lifted up and spread over it. It consists of the Tell, hilly lands along the coast, and the rich plains and valleys

between them and the Atlas Mountains; of the high plateaus and valleys of the Atlas, furnishing excellent pasture; and of the southern slope of the mountains, covered with tracts of scanty vegetation which fade off into the sands of the Sahara.

The Tell is the best part of Algeria. It is a land of rich farms, gardens, orchards, and vineyards. It has many villages and it supports most of the people.

The native Algerians are much like the Moroccans. There are many Kabyles, people of the white race, some with rosy complexions and fair hair; there are many brown-skinned Arabs, with black hair and eyes, fine teeth, and aquiline noses; there are Moors and negroes and Jews mixed with the others. The population all told is about five millions, of whom all but a few hundred thousand are Africans. The others are Frenchmen, Spaniards, Jews, and Italians. The Frenchmen are by far the most numerous of the Europeans, and they are steadily increasing in number.

But how did Algeria become a possession of France? The story is somewhat connected with the history of our country. For more than ten centuries Algeria, Tunis, and Tripoli were the homes of some of the greatest robbers on earth. They were ruled by the Barbary pirates, Moors who preyed upon the shipping of the Mediterranean Sea, robbing and enslaving their captives. They were so strong that other nations paid tribute to them in order that their ships might not be molested. This was at the time we began to build up our commerce, and for a while we also paid tribute.

In 1815, however, the United States decided that it

would submit to this imposition no longer, and Commodore Decatur was sent out with some of our men-of-war to serve notice to the Dey of Algiers (al-jērz′), the leader of the pirates, that we would pay him tribute no more.

As the Commodore gave this notice his guns were pointed at the city of Algiers, and the Dey saw he would have trouble in enforcing his demands. So he suggested that the tribute might be omitted if the Commodore would storm the town, using powder only. The Dey thought such a pretense would give him an excuse for not enforcing the tribute.

Commodore Decatur replied that cannon balls always went with American powder, and that if the Dey took the one he must take the other. The result was that all talk of tribute was dropped, and the Americans sailed away.

A little later the English refused to pay, and in retaliation for outrages they laid Algiers in ruins. Then came trouble with France, and the Dey, while discussing affairs with the French representative, grew angry and struck him in the face with his fan.

That blow cost him his kingdom. The French at once declared war. They sent an army to Algeria, defeated the Dey, and annexed the country to France. This was in 1830, and since then the French have been in possession. They have made Algeria one of the states or provinces of their Republic. It sends its own representatives to the Congress at Paris and has a governor general and other French officials to rule it.

We shall find Algeria far different from Morocco. There our traveling was on bridle paths and caravan tracks; here it will be over roads and railroads. French

soldiers are everywhere, and good order prevails in both town and country.

We begin our travels in Oran (ō-rän′), the chief port of western Algeria. The boat from Tangier lands us on a long pier, and we take carriages for a drive through the town, passing drays loaded with wine, and donkey carts

"We begin our travels in Oran, . . ."

carrying all kinds of goods. In Morocco there were no vehicles whatever. Here we have excellent carriages, and the streets are wide and well paved.

We drive by many fine buildings made of marble from the mountains near by. They are European in style, consisting of four or five stories, with shops on the ground floors, and hotels, or apartments, above. The shops are like those of French cities. There are many cafés, facing the

street, with tables outside them, about which Africans and Europeans are chatting as they drink coffee and wine.

Farther back are white, boxlike buildings, the homes of Arabs and Moors. There are mosques with tall minarets and also Christian churches. In the native quarter are bazaars and all the queer features of Oriental life.

The Algerians are half African and half European. Here goes a Jew with his cap and long coat tied in at the waist; there is a Moor in turban and gown, and farther up street are Berbers in from the country with fruit and vegetables for sale. We see French soldiers in Zouave uniforms with long-tasseled caps on their heads, and, now and then, a French lady, as dainty as though she had stepped from the boulevards of Paris into the queer streets of this African France. There are Moorish ladies in veils and Jewish girls without veils. There are Berber women with arms and faces tattooed, and all together such a strange mixture of people that we are at a loss to class some of them, and often wonder just who they are.

We spend a day or so at the hotel, enjoying the excellent meals, and then take the cars for the city of Algiers, the capital, about two hundred and sixty miles to the eastward. How delightful it is! The sky is bright blue and the air from the mountains is bracing. A great part of our journey is through the rich lands of the Tell, by plantations of tobacco, wheat, barley, and oats, and over plains covered with alfa grass, which men are cutting and baling for shipment to Europe, where it will be made into paper. Here are orchards of apples, peaches, and pears, and there ripe oranges peep at us through their yellow eyes out of the green. There are trees loaded with dark purple figs

and other trees full of light yellow lemons. There are gnarly olive orchards bearing fruit like green plums, and vast vineyards loaded with grapes used for making wine for export to France.

Now we leave the plains for the mountains. We ride for miles through forests of cork oaks, where they are cutting the bark and baling it for export to be made into bottle stoppers and other such things. There are sheep, goats, and camels feeding on the grass, watched by shepherds, and now and then a village of tents, made of black and white cloth, the homes of these men who move about with their flocks from pasture to pasture.

There are many villages in the Tell, including settlements inhabited by the French, and in both mountain and valley are the little towns of the Berbers. The Berbers are the most industrious people of northern Africa. They work for the French on the farms and in the cities. They have also many small farms of their own, scattered about the villages where they live, their lands being so carefully divided that several families will often own a part of one petty tract.

Now and then we leave the train to visit the villages. The Berbers are polite; they show us their houses and make us at home. The ordinary house has but one story, and seldom more than one room. In this room the people eat and sleep. Their bed is the ground, and a sheepskin takes the place of a mattress. The goats and sheep often sleep in the house with the family.

How dark it is! The only light comes through the door, for there are no windows. That hole in the ground filled with ashes is where the cooking is done, and every-

thing is of the rudest description. These people have their own customs. They are mostly Mohammedans, but a Berber seldom has more than one wife, and the women go about without veils. Marriage is a business transaction, a man always paying a price for his wife to her parents.

Berber woman and child.

The Berbers are among the oldest of the African peoples; they have lived so long in this part of the world that no one knows just where they came from. They have fought again and again for their rights, having been conquered by the Phœnicians, Romans, Vandals, and Moors before the French came.

They are now divided into many tribes, and are still to a great extent their own rulers. Each village is a little republic, governed by its head men, who make the laws and appoint officers to carry them out. The people are proud of their tribes, and the man who brings disgrace on his tribe must leave it and his house is torn down. They are prospering under the protection of the French. Their children attend the French schools, and they are advancing in civilization and wealth.

6. IN ALGIERS

WE begin our travels this morning with a walk through Algiers, the capital of African France. We are in one of the largest cities on the African coast; it is an important port of the Mediterranean Sea. Our hotel is on a

"Our hotel is on a broad boulevard . . ."

broad boulevard facing the harbor. There are large buildings all about us containing fine stores, restaurants, and cafés on the ground floor, with offices and dwellings above. Those huge structures nearer the water are warehouses.

The harbor is full of vessels. The boats lie inside two walls of stone, which inclose several hundred acres of water, so deep that the largest ocean steamers can come

in without danger. The ships are from all parts of the Mediterranean Sea, from the European ports on the Atlantic, and even from China and Japan by way of the Suez Canal. There are more French ships than any other, for the chief trade of Algeria is with the mother country. Notice the steamer now coming in, the black smoke rolling in volumes out of its funnel. That is the regular boat from Marseilles. It left there twenty-seven hours ago with its load of mail, passengers, and freight. One of those boats arrives every day, forming the chief connection between France and its African colony.

We stroll down to the edge of the harbor and watch the loading and unloading of goods. There are ships from London taking off coal, and others bound for that port loading alfa grass, wheat, cork, dates, and wines. There are French steamers bringing in flour, meat, and fruit, and smaller boats from Spain, Italy, Greece, and other countries about. There is a sailing vessel from Boston with a cargo of salt fish, and a steamer from Argentina with jerked meat to be sold to the inhabitants of the Tell and the regions beyond it. We can easily see that Algiers has a large trade, and that Algeria is commercially important to the markets of the world.

Turning our steps from the harbor, we go on up into the city. The streets of the lower part of it are wide and well paved. The avenues are shaded by palms, and there are statues here and there. We pass the public buildings and then stop at the great mosque. It is an enormous white structure, covering several acres, built about a court in which there are trees and a fountain. The turbaned priest on the minaret is calling out the hour of prayer, and

we take off our shoes and walk in. There are many Arabs, Moors, and other Mohammedans inside. Some are standing, some kneeling, and some bowing their heads to the ground as they go through their prayers. We notice that their faces are all turned the same way. They are looking

"Some are standing, some kneeling, . . ."

toward the east, for the Mohammedan always prays with his face toward Mecca, which is in that direction. Outside in the courtyard we see long-gowned men washing their hands and feet.

We make our way up the hill. Algiers is built in the shape of an amphitheater, its streets rising terrace above terrace. The French quarter is down near the harbor. The Arabs, Moors, negroes, and other native Africans live farther up. Their houses are flat-roofed, with white walls and with but few windows facing the street. The streets

are narrow. Some of them are devoted to the bazaars, being roofed over with matting and walled with small stores in which men are sitting or standing, selling all kinds of goods. The shops are larger than in Fez, but nevertheless little more than holes in the wall, and the customers stand in the street as they buy. Each branch of merchandise has its quarter. One bazaar is devoted to the shoemakers. Here we see slippers and shoes, some made of bright-colored leather and turned up at the toes. Another street is taken up by the jewelers, and in another men are selling the perfumery of which the Mohammedans are so fond. We buy some delicious attar of roses, a drop of which will perfume one's trunk for a month, and then go on to shops containing beautiful carpets and rugs, stopping at a café to drink some Turkish coffee, which is as sweet as molasses and almost as thick.

A street in the Arab quarter.

As we sit, we watch the strange crowd passing by. We are at a corner where we can observe the people as they go in and out of the bazaars and ride to and fro. The crowd is typical of Algiers, the meeting place of Europe

and Africa. There are French soldiers in Zouave uniforms, and tourists from England and America in white suits and cork hats. There are Spaniards, Italians, and French of all classes. We see Arabs in their long gowns, dark-skinned Bedouins (bĕd′o͝o-ēns) just in from the desert, fierce-looking Berbers from the mountains, and turbaned Moors, Egyptians, and Turks. Every one has his own dress, from that Greek sailor in petticoats to the negro porter behind him wearing almost no clothes whatever. There are women as well as men: French ladies in Parisian costume; Jewish girls in long, straight gowns of pink, red, green, or yellow; Moorish women so veiled that we can see only their eyes; and rosy-cheeked Berber maids with bare faces. There are boys with shaved heads in gowns and skull caps, and half-naked babies carried along in the arms of their mothers.

Leaving the café, we go into the streets inhabited by the richer Algerians. The doors of some of the houses are open, and we can look in. They are built around courts, in which fountains are playing, and over which matting is often stretched to keep out the sun. The floors of such houses are marble, and the walls are beautifully carved. The people often sit in the court and sometimes eat there. About the court are the kitchen, the bath, and the storerooms. The usual sitting or sleeping rooms are upstairs, and above them are the roofs, where the women go on pleasant days to take the air and to gossip and chat.

We do not see the Mohammedan women. They have their quarters apart from the men of the family, and it would not be thought polite for boys to ask to go in. This is the case in all Mohammedan countries, the faces

of the women being seen only by their fathers and brothers or very near relatives. The women always wear veils up to their eyes when out on the streets. At home they take off their veils, and usually go about barefooted or in slippers. The children of the richer classes are well clad. They are bright little ones, and seem to have as much fun as we do.

"They . . . seem to have as much fun as we do."

Algerian girls are often married at twelve or thirteen years of age, and at twenty a woman is thought to be an old maid. According to the Mohammedan religion one man may have four wives, but many of the Moors and Arabs have but one each.

Leaving Algiers, we go by railroad to the city of Constantine (kŏn-stăn-tēn′), in the eastern part of the country, traveling for miles through vineyards, where the Berbers are at work picking grapes and making them into the wine for which the country is noted. Much of the way is across a plain, with ranges of mountains in view. We see Arabs plowing the fields, using donkeys, mules, and sometimes oxen or camels. The plows are crooked sticks shod

with iron, and they appear small when drawn by the camels. On our way through the mountains we look in vain for the Numidian lions, which were so famous in the days of old Rome. They were caught here and carried to Italy for the gladiatorial shows. The lion has almost disappeared from this part of the world.

The country is beautiful, especially in the mountains. We pass many natural wonders, and when we come to Constantine itself we look at it again and again, for we

"Constantine stands upon a rocky plateau . . ."

have never heard of a city like this before. Constantine stands upon a rocky plateau at an elevation of eighteen hundred feet above the sea. The plateau is only about two miles in circumference, and it is surrounded on all sides by a ravine, which is from fifteen feet to four hundred feet

wide and in some places six hundred feet deep. Through the ravine a rushing river flows, and the rock itself upon which Constantine stands is connected with the mainland by a narrow isthmus much like the Natural Bridge of Virginia. Iron bridges have also been built across the ravine, and we ride over one of them into the city. More than fifty thousand people live upon this rock and do business here.

Constantine is the commercial center of eastern Algeria, although it is about fifty miles south of the Mediterranean Sea. It is noted for its embroideries in leather, its shoes, saddles, and harness, and also for its haiks and burnouses, of which more than one hundred thousand are made every year. The city has its French and native quarters. It has a strong garrison, for it is a natural fortification, and there are many soldiers marching about.

We call upon the governor, visit the great mosque, and spend some time in the bazaars buying curios to send to our friends. We notice that good order is everywhere kept, and can not help contrasting the excellent condition of Algeria under the French with the barbarism of Morocco as ruled by the Sultan.

7. THE CITY OF TUNIS

WE have come by railroad from Constantine to the city of Tunis, the capital of Tunis, and the largest city in Africa with the exception of Alexandria and Cairo. Tunis is almost as large as Wisconsin, with a population of about two millions. It is like parts of Algeria, and the inhabitants are not very different. It is under the pro-

tection of the French, and we shall meet many French officials and soldiers. The country still has a native ruler called the Bey; but his powers are few, and he has to do as the French governor directs.

On our way to the city of Tunis we ride by rich pastures, upon which donkeys, sheep, cattle, and camels are feeding, watched by men, women, and children. We pass many fields of wheat, barley, and oats, where dark-skinned people are cultivating the crops, frequently seeing a great ungainly camel drawing a plow. Now we are in mountains where there are forests of cork trees, and now in valleys spotted with olive orchards, fig trees, and groves of date palms. When our train stops at a station, Arab women bring fresh water and fruit to the cars, and we lay in a stock of oranges, figs, and dates to eat on the train. The track winds its way in and out through the valley of a small river, and passing over a wide plain spotted with brackish lakes brings to our view the great, white, flat-roofed city of Tunis.

". . . Arab women bring fresh water . . ."

Tunis is situated on an isthmus between two shallow salt lakes not far from the Gulf of Tunis. It is connected with the Gulf by a canal, so that ships come right through

to the town. The city proper is almost surrounded by walls, and at its back are hills covered with villas and gardens. It has four wide streets, and we drive in carriages from the railroad station to the hotel. There we leave our baggage and start out for a donkey tour of exploration. Each of us has an Arab boy running behind to urge on his steed, and we go on the gallop from one part of the place to another.

A street in Tunis.

Tunis has a population of about two hundred thousand, made up of Moors, Arabs, Turks, Egyptians, negroes, Jews, and people from Europe and the islands of the Mediterranean. We make our way through the French quarter, which is like similar parts of the Algerian cities, and then direct our donkey boys to take us through the Maltese, Jewish, and Arab quarters, and then on into the bazaars.

How interesting it is! We are riding in and out of a throng of people as curiously clad as in a great masquerade. Notice that strange creature dressed all in white with a black veil hiding almost the whole front of

her person. Now she holds up the veil with both hands and peeps out below it, making her way through the streets without her face being seen. She is a Mohammedan and therefore hides her face from all men but her husband. The fat woman a little farther on in jacket and trousers with no veil at all is a Jewess. She is the wife of a rich merchant, and her excessive plumpness is counted a sign of beauty and wealth. The man behind her with the heavy black rope tied around his head is an Arab, and the hooded man with him is a Moor.

"Now she holds up the veil . . ."

See how that gray-bearded Turk in the black gown, green turban, and red slippers is scowling at us. He is a Mohammedan sheik, and he does not like Christians. Green was the favorite color of the prophet Mohammed, and the sheik has the right to wear that turban because he has been to Mecca, where Mohammed was born.

There are many Berbers; that tall gaunt Arab has just come in from the desert, and those two jet-black negroes were probably brought across the Sahara in caravans and sold in Tunis as slaves. There are also olive-skinned Italians and Greeks and rosy-cheeked people from Malta, a little island in the Mediterranean not far away.

The streets are narrow, and we are often crowded close to the walls. Now it is by a camel with a great load of

wood and now by a donkey carrying fruit or dirty pigskins filled with oil. We are jostled by the mules of rich Arabs in turbans and gowns, and we have to look out for the blind men who pick their way with their staffs. In all parts of northern Africa there are many blind people. The sun is so dazzling that it hurts the eyes, and flies and other insects cling to the eyelids, sometimes causing the loss of sight.

Now we stop at the stand of an Arab who sells sweetmeats and candy, and now at a booth where a long-gowned man is frying meat and selling it hot from the fire. Here a letter writer is working away; beside him is a Jew money changer, and farther on are several fruit peddlers with fresh dates, oranges, and figs.

". . . the narrow streets are covered with matting or boards."

We are now in the bazaars, where the narrow streets are covered with matting or boards. There is no breeze, and the air at times is terribly hot. The merchants have their goods in little cavelike holes facing the street. Each street has its wares, some being devoted to tailors, others to saddlers, to rug sellers, and to iron mongers.

There is much work going on. Here they are weaving silk, wool, or cotton; there men and boys are working in brass; and farther on they are embroidering leather. We pause in one bazaar where a woman is buying henna to stain her finger nails and toe nails red, for she thinks that color most beautiful; and at another we watch the merchants dealing out perfumes so costly that they are sold by the drop.

We often stop to price curios to take home to our friends. The turbaned dealers ask us to drink coffee with them, and we sit cross-legged on the floors of their stores and sip the rich brown liquid as we bargain together.

One of the merchants is very friendly, and at his invitation we go with him to his house. He takes us in and out through the winding streets and stops at last before a square white building in which slits take the place of windows. The front door is richly carved.

We first enter a court surrounded by marble columns, behind which are the rooms of the house. There are soft rugs on the floors and wide divans about the walls. Our host motions us to take seats with him on the divans in Oriental fashion. We do so, and by and by black-skinned, white-gowned servants bring in trays of candies and sherbet. The latter is a sirup which we eat with a spoon. It is almost as thick as molasses, and is delicious.

The little sons of our host come in, and he presents them to us. The boys cling to their father's knee as they look at us with wondering eyes. He caresses them, and we see that Mohammedans are quite as fond of their children as our parents are of us.

At the end of our call we go to the Jewish quarter. Here the men wear fez caps or turbans and gowns. Most of them shave the head, leaving only a tuft of hair on the top. The women wear trousers at home, and on dress occasions some have velvet pantaloons decorated with silver or gold coins and bangles. A girl may thus wear her whole fortune on her clothes. Is it not strange to see men in gowns and women in trousers?

On our way back to the hotel we visit some of the schools which have been established by the French. They are to be found throughout Tunis. Tunis has also a Mohammedan university and Mohammedan primary schools, where young Arabs and Moors study the Koran, as well as the French language and other things.

We have already learned that northern Africa has had an important part in the history of the world. Tunis and Algeria were once the home of the Phœnicians, one of the greatest of the ancient nations, and right here near Tunis was Carthage, their most famous city. Carthage was so large that the wall around it was twenty-three miles long. There were towers in the wall and casements, in which were stabled three hundred elephants and four thousand horses for use in war. The city was situated on a beautiful bay divided into two harbors; it had docks for several hundred merchant ships, and its vessels of war had iron beaks which could be driven into the ships of the enemy.

For a long time there were wars between Carthage and Rome. The Romans found the Carthaginians such brave fighters that they decided that there would always be trouble unless Carthage was destroyed. After many de-

feats they succeeded in conquering the Carthaginians and burned their city. They even plowed up the ground upon which it stood and made it into pastures, where their sheep and goats fed, watched by Roman slaves. Later still Tunis and Algeria produced so much wheat that they became known as the granary of Rome.

"The vast buildings have all disappeared."

This place, however, was well fitted for a city, and as time went on the Romans reëstablished Carthage and it again became great. It was afterward torn to pieces by the Vandals, and finally destroyed by the Mohammedans.

The site of this ancient city is only nine miles away, and we drive out for a look at its ruins. The vast buildings have all disappeared. Hardly one stone has been left upon another, except in the old cisterns which supplied the

city with water. We find only a few bits of marble or earthenware among the ruins to take home as relics; and we learn that the stones of the ancient palaces were used to build Tunis, and that for ages ships came here from Italy and other parts of the Mediterranean Sea to carry away the marble columns, mosaic floors, bricks, and beautiful tiles. As we wander along the shores of the bay, we try and picture to ourselves the boys and girls who sported here ages ago, when Tunis belonged to one of the world's greatest peoples.

8. THE DESERT OF SAHARA

OUR journeys for the next few weeks are to be in the desert. We have been near it many times since we landed at Tangier, but we shall now venture far out into this vast region of rock and sand.

With the exception of the parts of Morocco, Algeria, and Tunis which we have explored, and the long, narrow valley of the Nile farther eastward, almost the whole of northern Africa is taken up by the Sahara, the longest continuous desert on earth. It is one of a series of deserts which extends throughout Asia into Africa, and clear across that continent to the Atlantic Ocean.

The Sahara is so vast that if four mighty giants could lift it up at the corners and drop it down upon our country it would not only cover it, but in places would extend out into Canada and the Mexican gulf. From west to east its thirsty length is so great that no explorer has been able to cross it in that direction, and its width from north to south is greater than the distance from the Atlantic

Ocean to the Rocky Mountains. On the north it extends in some places to the Mediterranean Sea, and on the south it loses itself in the Sudan — a wide belt of rich, well-watered land which crosses Africa, extending southward to the fertile regions of the river Kongo. The Sudan has a luxuriant growth of grass and trees; it is peopled by blacks of many tribes, who are largely supplied with goods carried across the Sahara.

But what kind of a country is this vast desert region? The word "Sahara," which comes from the Arabic, means "uninhabited wilderness." This hardly describes the Sahara, for parts of it are inhabited; these are the oases, situated about wells and springs, where the land, for a small space, blossoms like the rose. Each oasis has its little settlement, shaded by date palms and other trees; there are so many of them that their people all together number hundreds of thousands.

In general, however, the Sahara is a waste of dry land cut by dry mountain chains, with many valleys and dry beds of rivers running this way and that. Here it consists of a vast plain of sand, there the land rises in a rocky plateau, and miles farther on are bleak and bare mountains as ragged and stony as our Rockies. Here the sand has blown and drifted into dunes or hills, much as the snowdrifts in our Northern States; and there the plain is covered with pebbles and bowlders, smooth round stones of many colors.

Some people look upon the desert as all low, flat, and sandy. This is not the nature of much of the Sahara. For the most part it is lofty plateaus, the average height of the land being more than a quarter of a mile above the

"... a billowy ocean of rock and sand ..."

Mediterranean Sea. The desert is often called a sea of sand; we might better describe it as a billowy ocean of rock and sand tossed by the storms of time into all sorts of shapes.

If the Sahara were all waste, there could be no traveling through it. Here and there, along the northern and southern edges, is a scanty vegetation, furnishing pasture for camels and sheep; other regions are so green, during parts of the winter and spring, that the wandering tribes drive their animals there to feed; and the oases are islands of green in this dry ocean, made fertile by the water from springs, wells, underground streams, or hollows in the beds of waddies, that is, rivers which are dry most of the year. In some of the waddies are stunted trees, and on the desert itself one often finds ragged plants bristling with thorns.

The oases have date palms, and lemon, orange, peach, apricot, and other fruit trees; they grow wheat, barley, vegetables, and beautiful flowers.

It is the lack of moisture only that makes the Sahara a desert. Its soil is, for the most part, so rich that, where watered, it produces as well as our Western prairies, or India, Siam, Hawaii, and the West Indies, which are luxuriant, well-watered lands in about the same latitude.

"But why is this great tract without water?" we ask.

The moisture-laden winds from the northwest are squeezed dry by the cold Atlas Mountains, and those from the south and east are already dry before they reach the Sahara. In the winter the winds blow from the desert outward, while in the summer, when they blow inward, the sun acting upon the sand and rock makes the air so hot that it evaporates the moisture before it can form into drops and fall as rain.

The result is that the winds of the desert are dry winds, and the storms, which are terrible at times, are sand storms, which dash themselves against the rocks and scour them, making more sand. The air is hot in the daytime, but cold at night. This expands and contracts the rocks so that they split, wear out, and gradually fall to pieces. Thus the face of the desert is constantly changing. If a few showers of rain fall anywhere, plants spring up, and for a time there is a bed of green dotted with flowers. In some places water collects under the sand, so that artesian wells can be made and irrigated oases formed by them. The French have many such wells in the arid lands south of Algeria, and have thereby made fertile spots, upon which groves of date palms and other things are growing.

The land here is so rich that the Arabs say, "If you plant a stick in the desert and water it, you will soon have a tree."

9. IN THE OASIS OF BISKRA

LEAVING Tunis, we return by train to Constantine and go southward through the mountains of Algeria into the desert on the railroad which the French have built to the oasis of Biskra. As we approach the Sahara the country grows more barren and the pasture more scanty. Now and then we go by a mean Arab village, half tents, half hovels, with a flock of sheep or goats grazing near it, watched by ragged men or boys. We pass brackish lakes or salt marshes, startling the wild geese and red-legged flamingoes feeding upon them. We shoot in and out of tunnels, and go through a wild gorge into an oasis shaded by date palms of dark green. Farther on, stretching away on both sides of the track, we pass through more sand and rock, and finally dash into Biskra, one of the most thriving oases of the Sahara and the chief one accessible by railroad.

How delightful it is and how curious! We are in the midst of the desert, in a green valley so small that we can walk from one end of it to the other in an hour and across it in fifteen minutes or less. All about us is the dry, barren sand; we see bare yellow mountains away off at the north, and an oasis, here and there, standing out against other parts of the horizon.

Biskra itself is delightfully green. It has thousands of date palms, with olive groves and orchards of orange,

lemon, apricot, and other trees under them. In some places vegetables are growing below the fruit trees, so that there are three crops, one rising above another, upon the same ground.

The oasis is watered by springs; it is divided into little farms, each with a mud wall about it, the farmers living in

"Biskra itself is delightfully green."

a village not far away. Here and there is a well, out of which the water is raised by creaking wheels, moved by camels, and emptied into troughs which extend into the fields. Each farmer has the right to a fixed amount of the water.

The town of Biskra, where most of the people live, is surrounded by a wall and a ditch. It is the seat of government of the vast territories which the French own

in the Algerian Sahara, and it has many Frenchmen and Italians mixed with its Arabs, Bedouins, and Moors.

Biskra is more like the towns of Algeria and Tunis than the other oases settlements we shall visit in our caravan rides over the desert. Its streets are wide and well paved; it has a park where the band plays every afternoon, and a fort with French soldiers. It has French stores, as well as Arab bazaars and also hotels, for many Europeans come to Biskra for their health during the winter.

The natives here in the desert are even more strange than those of the north. Many of them are jet-black. The men are fierce-looking, straight, and well formed. The women are for the most part unveiled. They dress in gay colors and wear great earrings, bracelets, and anklets of gold and silver. Some have just come in from the desert, and we frequently meet a woman riding a camel, bobbing up and down as she goes through the street.

In the town of Biskra.

Biskra is an important trading center. Caravans come here from all parts of the Sahara, bringing dates and other products from the oases to be shipped off to Europe, and

taking back all sorts of goods in exchange. We see long lines of camels, loaded with dates, swinging their way through the streets, and learn that dates are one of the chief products of this part of the world. An oasis is valuable according to the number of date trees it will support. There are almost two hundred thousand such palms in Biskra; and so many dates are brought in every year that if they were evenly divided, there would be enough to give a big handful to every boy and girl in the United States.

We stroll about the oasis, talking through our interpreters with the Arab farmers and learning how dates are grown. We pick some from the younger trees and bite into them. The ripe dates are delicious, but the green ones pucker our mouths like unripe persimmons.

The date palm, although it thrives on the dry air of the desert, must have plenty of water about its roots or it will die. The Arabs call it the queen of trees, and say it must have its head in the burning sun and its feet in running water. For this reason the orchards are irrigated, and ditches are dug around the trees to keep the roots moist. When other crops are planted under the palms, the whole field is flooded.

The date tree is usually grown from one of the suckers which sprout from the trunks of the older trees. The suckers are taken off and planted. If well watered, they strike root at once, and within four or five years begin to have fruit. They are in full bearing at about eleven years, after which they will each yield a hundred pounds or more of dates a year for about a century.

In the Sahara the date palm begins to blossom in April,

great bunches of beautiful flowers sprouting out of its top. After a time the blossoms fall, and the green dates appear. As the summer goes on, they change to a reddish or yellowish color, and grow brighter and brighter until they are ripe, when the yellow dates are the color of amber and the red dates are brownish or black. As the fruit ripens, the flesh, which was unpleasant to the taste, changes and becomes so sweet that in some varieties more than half of it is pure sugar.

"Dates are exported in bags . . ."

The dates shipped to our country are sweet dates. They are allowed to dry on the trees. They shrink as they dry and after a week or so are ready to be picked and packed for the market. Dates are exported in bags or long wooden boxes, the choicest varieties being repacked before they go to Europe or the United States.

Dates are of as many varieties as apples. More than one hundred different kinds are grown in the Sahara; some are hard, some soft, some sweet, and others so dry that one

can not bite into them. Those exported to the United States are of the soft variety; they are so full of juice that it is often drained off before the fruit is packed. The date juice forms a thick sirup, which is eaten as a preserve under the name of date honey.

Other dates do not dry readily, although they contain less sugar; these might be called table dates, as they are often eaten fresh from the trees. Another and very important variety is the dry date. This contains but little sugar, and it is not soft or sticky when ripe. It is allowed to remain on the tree until it drops, and when stored away in a dry place can be kept for years. Dry dates are almost unknown outside the Sahara, but they form one of the chief foods of the people. They might be called the bread of the desert. They are eaten by man and beast, being often fed to camels and even to dogs.

We delight in the ripe dates and find we can eat great quantities of them and still long for more. They are grown in all the oases and will form a part of our food for some time to come.

Going from the little farms on through the walls into the city of Biskra, we stroll about, visiting the bazaars and the markets, arranging for our caravan trip out into the desert. There are long lines of camels always coming into Biskra from many parts of the Sahara, and we have no trouble in selecting a party of well-guarded Arabs with whom we can travel. We are especially careful, in picking our camels, to choose good riding animals. We try the different beasts again and again, until we get some which ride almost as easily as rocking horses, and are so fleet that they can, we are told, travel a hundred miles in one day.

10. A CARAVAN RIDE

WE have left Biskra and are far out on the desert, moving slowly along in a great caravan, bound southward through the central Sahara. At the front, on fast, racing camels, are the chiefs of the tribes which make

". . . moving slowly along in a great caravan, . . ."

up the caravan. They have guns in their hands and are watching out for the robber bands so common throughout the Sahara. Behind are the freight camels, scarred, dingy, and sullen, heavily loaded with all sorts of merchandise, bound in with ropes. Long-gowned Arabs, so shrouded in white or brown that we can see only their faces,

are swinging to and fro on these ungainly beasts. There are native women and children in our party, and among them a dark-skinned mother holding a baby. There are people walking as well as riding, and a score of dogs are trotting beside us.

Some of the camels are loaded with pigskins of water, and others carry jugs of oil, crates and boxes of cloth, and great bundles of dates. We have a goodly supply of food on the animals hired especially for us, and also some skin water bottles. The water keeps cool, owing to the evaporation of that which oozes through the skin, but it tastes of the bag and sickens us so that it is some time before we can drink it without making wry faces.

Kneeling camel, and owner.

Our route through the desert is from oasis to oasis. There is neither path nor road, and our guides make their way from one watering place to another by the stars or by rocks, hills, or other marks on the landscape, arranging the marches so that we have a well or spring by which to camp almost every night. The camels are made to kneel down when we stop, and their loads are taken off. Their feet are care-

fully examined to see if they have been torn by the rocks, and if so, the skin is sewed together or patches of leather or rags are wrapped about them. They are then hobbled by tying one leg up at the knee, to keep them from running away. We next pitch our tents and smooth the soft sand out for a bed. A fire is made from the wood we carry with us, and we cook our meals on the coals. We arrange the camp so as to be ready to fight if attacked, and go to bed with our guns within reach.

During our travels it is sometimes terribly hot. The sun beats down out of a cloudless sky. It strikes the white sand and throws the glare back into our faces. The camels raise a thick dust, and we wipe our blue spectacles again and again. We fasten cloths about our heads, with slits for the eyes and nose. We laugh at one another, we all look so strange.

Our camels jolt us, notwithstanding they are good-riding animals. They swing along with a motion like that of a ship on the waves. We grow seasick, but this passes off, as in time does the terrible pain at the waist, caused by our bobbing up and down all day long. We start early each morning, and at noon are glad to stop under the shadow of some precipice or rocky hill to rest.

One day our camping place is surrounded by red sand and on another we are in the midst of a tract of small pebbles — red, brown, white, and black. They are smooth and shiny, and we want some to carry back home. We have taken off our shoes and stockings while resting, and start to walk over the pebbles in our bare feet. We jump back with cries of pain. The stones are as hot as fire; it feels like walking on coals.

Now we are starting again, the freight camels grunting and crying as they are forced to get up with their loads. They growl as they move onward, and are so angry that we fear to go near them lest they should bite.

How oppressive the air is! There is not a breath stirring. But look! See that black cloud coming up away off at the east. How fast it grows! It has already shrouded half of the sky. It is bringing a wind with it which throws the sand into our faces. The sand storm increases. Some of the grains are as large as peas. It is a veritable stone hail. We are in the midst of one of the great storms of the desert. Our Arab friends have stopped the caravan. They have made the camels kneel on the sand, and they direct us to lie down with our faces to the ground by the side of the camels and to wait for the storm to blow over. Now the clouds have covered the heavens. The rain of sand hides the sun. We dare not open our eyes. The camels are moaning; they have thrust their noses into the ground, and they blow out sand as they breathe.

See, it grows lighter! The storm is passing. It is gone, and the sky is again bright. We rise and shake ourselves, the sand rolling off as though it were snow. Some of the grains have got in at our collars, and, as they move about over our bodies, they make us so uncomfortable that we sit very uneasily for the rest of the day. We are reminded of the girl in the fairy tale who felt a pea through seven feather beds. In our case the peas are sand bullets, and they lie close to the skin.

The Sahara has frequent storms of this kind. It has some which last for days, when the air is intensely hot and the sand blows into every crack and crevice of the homes

on the oases and almost buries the caravans moving over the desert.

The best time for traveling is after the sun has gone down and the stars and moon rise. Then the temperature rapidly falls, and it soon becomes so cold that we put on our overcoats and are glad to throw a blanket over our legs. The air is now fresh and bracing. It is clear, and the whole dome of the sky is as visible as on the sea. How bright the stars shine and how big the moon seems! They appear to be closer to the earth than at home.

Our guides seem better natured at night, and they tell us all sorts of stories of life on the desert. They describe the rich oasis of Tafilet (tăf-ĭ-lĕt′) in the western Sahara, talk about Tchad (chäd), the great lake in the south, and a terrible, stony, waterless wilderness not far from our route, which it requires days to cross.

They speak of the wonderful caravans which go from Fez in Morocco to Timbuktu in the Sudan, saying that some of them have a thousand camels guarded by five hundred men, and that a caravan often carries a fortune in goods. These caravans take all sorts of merchandise from Europe across the desert, and bring back ivory, gold dust, ostrich feathers, gums, wax, and other such things in exchange.

An important part of the trade of the western Sahara is salt, which comes from the mines of rock salt in that region. The salt is dug out in large lumps and trimmed into blocks about a yard long and half a yard wide, in which shape they can be easily loaded upon camels. The salt miners live not far from the mines. They build their homes of blocks of rock salt, roofing them with camel skins; they rely for their water on an oasis some distance away.

The Arabs describe the different caravan routes across the Sahara, showing us that the best of them are as well known as our highways at home. These routes cross the desert from the ports on the Mediterranean Sea to the chief centers of population in the Sudan. There are five routes especially noted, and these connect Morocco, Algeria, and Tripoli on the north with Timbuktu, Sokoto (sō′kō-tō), Kano (kä-nō′), and other places on the south. In a trip like ours the freight camels go no faster than a man can walk, and it would take us about three months to travel from one side of the Sahara to the other. Now the French are planning to extend the railroad from Biskra southward to the Sudan, and thus connect that vast country with the Mediterranean Sea.

As we go on we pass caravans loaded with dates, wool, and other products on their way north. Each is guarded by Arab warriors on camels, for it is dangerous to travel through the desert unarmed.

From day to day we meet men of the different peoples who inhabit the Sahara. They are divided into three classes: tribes who live in tents of camel's-hair cloth and go about from place to place, driving their camels and other animals with them; the Tueregs, bands of warriors, who might be called the robbers of the Sahara; and those who live in the oases. The first two classes are wanderers; the third, the oases people, are farmers, who cultivate all sorts of vegetables, tobacco, cotton, grain, and barley, as well as date palms and other fruits.

The natives of the Sahara are almost all Mohammedans, controlled by their sheiks or priests. We find mosques in the larger oases, and observe that the Arabs of our cara-

"They kneel down in the desert . . ."

van say their prayers five times a day. They kneel down in the desert with their faces toward Mecca, and pray to God in the name of Mohammed.

As we wind our way in and out across the sands, we see a band of Tueregs now and then. We treat them politely, and as our force is a large one they do not attack us. The Tueregs are supposed to be the descendants of Berbers who in times past were crowded out into this wilderness from the fertile north lands, and who now make robbery and brigandage their trade. They are scattered throughout the Sahara and are noted for their cruelty, cunning, and quarrelsomeness.

We can easily distinguish the Tueregs long before they come to us. We know them by their fast-riding camels,

their odd costumes, and their weapons. They have swords and lances, and such clothes that they look more like women than men. Every warrior has a black veil over his face which hides all but his fierce, dark eyes. He does not take his veil off except at night, and some of the chiefs are said to wear their veils night and day. He

Tueregs.

wears a red cloth cap with a black tassel, a long white shirt with a black blouse embroidered with gold or silver, and wide Turkish trousers.

The Tueregs usually attack caravans when they are camping about the wells, or at an oasis when the camels are scattered. They sometimes come in disguise and hire out as guides, so that they can join in surprising the caravan when their fellows come up.

They are Mohammedans, but are not strict in keeping their religion. They seldom have more than one wife each, and the women do not wear veils. Their chief wealth is in camels and horses. They rear the finest of animals, treating them as children rather than beasts. The baby camel is often brought up with the children; it sometimes sleeps in the tent, and has a bite to eat with the family.

Traveling onward we come upon an encampment of Bedouins, one of the tribes which wanders from oasis to oasis with its camels, living in tents. The women grind some meal for us and give us cakes and bread and couscous, a dish of millet and meat which is one of their favorite foods. They are very polite, and we enjoy talking with them through our interpreter.

"... we come upon an encampment of Bedouins, ..."

At one camp the chief asks us to dine with him. The cloth is laid on the sand, and we sit down upon cushions about it. Each of us has a spoon and knife, but no fork. We see that our host eats with his fingers, and we do likewise. The food is highly spiced, and some is so hot with red pepper that it brings tears to our eyes. The chief dish is a kid roasted whole. It has been cooked on a pole running through it, being thus held over the fire. It is brought to the table with the pole still inside it. We each cut off a slice and tear the meat apart with our fingers. From time to time, during the meal, sweets are brought in; and at its close coffee is served in little cups not bigger than half an eggshell. The coffee is as thick as molasses and almost as sweet.

11. TRIPOLI AND ITS OASES

SO far our travels have been in the western and central Sahara, which are more or less under the protection of France. The French claim all the desert between their possessions of Algeria and Tunis and the territories they own in the Sudan, which take up almost the whole western part of that country. Their desert lands are so vast that they can not govern all of them; so that many of the wandering tribes do about as they please.

The land east of the French possessions belongs to Tripoli, a country ruled by Mohammedans under the protection of Turkey, and south of this is the dreary waste of the Libyan Desert, which is so barren that the great nations of Europe do not care to possess it.

We make our way in caravans from the Algerian Sahara across into Tripoli, stopping first at the thriving oasis of Ghadames (gä-dä′mĕs), which lies about three hundred miles south of the Mediterranean Sea. This oasis has one of the oldest towns of the Sahara. It was well known in Roman times, and it now has several thousand inhabitants.

An oasis village.

Entering the wall of Ghadames, we find ourselves in a maze of covered streets, so dark that they have been compared to the tunnels of coal mines. In many places the houses are built over the streets, the stores being in the tunnels below. The flat roofs of the houses are the favorite lounging places of the people during the evening.

We wind our way through one narrow vault after an-

other, talking to the Arabs, negroes, and Berbers who are working or idling, or buying and selling at the shops. We go to the gardens outside, finding them watered by artesian wells, and then take a look at the farms near by, with their beautiful green patches of wheat, barley, and millet. We enjoy the fresh dates, figs, and apricots, and also the camel's meat and camel's milk which are served at our meals.

Ghadames is a caravan center. It is situated at the great crossroads of the desert, and has communication by camel route with the Sudan, the city of Tripoli, and different parts of the Sahara. We join a caravan which is about leaving for Fezzan (fĕz-zän′), a sandy waste in the province of Tripoli, dotted with little oases. Here we travel for days, now surrounded by monotonous sand and rocks, and now resting in an oasis under the date palms, listening to the cooing of doves and the other birds which live in the trees. We visit Murzuk (mo͝or-zo͝ok′), a town hundreds of years older than Boston or New York. It has only seven thousand inhabitants; but it is an important place in this part of the world, because it is on the route between the Sudan and Tripoli, just where caravans can stop for water.

Murzuk is neither cheerful nor healthful. A traveler who once visited it thus referred to it: "How can one live where not a drop of rain falls, where not a single dish is to be had, where butter can no more be procured than the philosopher's stone, where wheat is the diet of kings alone, where the common man lives on dates, and fever has its headquarters?"

Murzuk was at one time a center of the slave trade, and slaves are still secretly sold here. They are brought

across the Sudan by Arab dealers, and thence taken on to Tripoli for sale to the Moors. It is said that the route from the Sudan to Murzuk may be traced by the bones of the slaves who have died on the way.

Arabs of Tripoli.

Now we have left Fezzan, and are traveling northward to the city of Tripoli. We find frequent oases; but along most of the way it is so barren that no animals can live. Before we came into the Sahara we feared that we might meet lions, leopards, and the other wild beasts which are said to infest this terrible wilderness. We discover that this is a mistake. Animals must have water and food, and the greater part of the Sahara is so arid that it has no animal life whatever. The lion, although called the king of the desert, seldom ventures far out from the cultivated and well-watered lands. He is found in the Sudan, and now and then in the Atlas Mountains, but not in the desert itself. It is the same with leopards, jackals, hyenas, foxes, and gazelles. Along the edges of the Sahara there are ostriches, and in the oases are birds of many kinds as well as turkeys and chickens.

Some of the oases have donkeys, horses, and cattle. The camel lives on every green tract, and it forms the chief beast of burden. It is noted for its hardiness and its ability to travel a long distance without water or food. It is the most important of all desert animals, furnishing milk and meat, and doing all sorts of work in addition to carrying its owner and his goods over the sands.

We meet more and more caravans as we approach Tripoli. The vegetation increases in extent and variety; the plants which were stunted far out in the sand are taller and more luxuriant, and they have fewer thorns.

By and by, we get out of the desert into the cultivated country which runs along the coast, and stop at last at Tripoli, the capital. The city has about forty thousand people. It is much like the towns we saw in Algeria. It lies right on the sea and is made up of square white buildings with flat roofs, above which the domes of mosques are to be seen. Tripoli is surrounded by a huge wall, which is guarded by soldiers who belong to the regiments encamped at the south of the town.

We leave our caravans and, after engaging rooms at the hotel, take a walk through the streets. We are dusty from our long ride over the desert and decide to have a bath in Moorish style. There are many bathhouses in all Mohammedan towns, and we have little trouble in finding one in Tripoli. The first room we enter has couches scattered about it, upon each of which a man or boy is lying wrapped in a white cloth. Some of the boys are sleeping; others look curiously at us. We are led into a side room, where two negroes undress us, giving each a cotton towel to wrap about him and a pair of slippers to protect his feet.

"Tripoli . . . is made up of square white buildings with flat roofs."

The negroes then take us into another room, floored with stone, which is so filled with steam that we can hardly see one another. Our guides lead us each to a bench and tell us to sit down. We do so, but jump up with a cry. The bench is burning hot, made so by the steam. We try it again, sinking down gingerly, and after a time find it quite comfortable.

As we sit there our bodies grow hotter and hotter, and the perspiration oozes from us in drops. One of the servants brings us cold water to drink, and then the sweat runs off in streams.

Now our attendants take us in hand. They make us lie down on the benches, giving us blocks of hot wood for pillows. They then begin to squeeze, pinch, and pound us. They twist our heads to loosen the muscles of the neck. They pull our arms out and jerk them this way

and that. They throw them across our chests and pull them back again. They exercise the legs, bending them at the knees, pulling and twisting them. They next knead the whole front of our bodies, and then roll us over on our stomachs and do the same with our backs, continuing until every muscle has been worked over like dough.

Next they lather us with soap, scrubbing the skin with gloves of coarse camel's hair, and then take fresh tow and scour it clean. We are now washed down with warm water, and, after drying, are wrapped in white cloths and taken to a couch in the outer room to sleep. We fall at once into a doze and awake to find that the pain has gone from our bodies and that we are wonderfully refreshed. Some excellent coffee is now brought in. We drink it and, after dressing, depart, feeling that a Moorish bath is by no means so bad after all.

Leaving the bath, we call on the American Consul, who introduces us to the Governor General of Tripoli, a stately Moor, appointed by the Sultan of Turkey to rule the country. He receives us in his palace and talks with us concerning the vast territory under him. He shows us that Tripoli extends for hundreds of miles along the coast from Tunis to Egypt, and that it goes far south into the Libyan Desert. He tells us that the strip of cultivated land near the sea is not large, but that there are many oases supporting all together about a million people.

The country is not well governed, and, as in all lands ruled by the Turks, the citizens are heavily taxed and much oppressed, and in civilization and wealth are far behind the neighboring natives who are governed by the great nations of Europe.

Tripoli has some of the shortest caravan routes across the desert; and ostrich feathers, ivory, and other products are brought here from central Africa to be transshipped to

"Each of us buys a small ostrich plume . . ."

Europe. We visit the dealers and see them weighing the great white tusks and the beautiful feathers. Each of us buys a small ostrich plume to send home.

12. THE LAND OF THE NILE

WE are now to travel through the strangest of all countries. The world has no other land like Egypt. It is a strip of rich soil, which has been built up layer by layer on the dreary sands of the Sahara by the mighty Nile.

This river is the longest in Africa, and with the exception of the Mississippi-Missouri the longest in the world. It rises in the highlands near the equator, having its source in Lake Victoria, the largest lake in Africa. It pours out of this lake and races for hundreds of miles through rapids and cataracts, then flows more slowly over

"It . . . races . . . through rapids and cataracts, . . ."

plains until it reaches the Sahara, through which it winds its way, spreading out into a wide fan where it empties into the Mediterranean Sea.

During its course, the Nile receives some very large tributaries, and among others the Blue Nile and the Atbara (ät-bä′rà), sometimes called the Black Nile from the color of its waters. The Blue Nile and the Atbara rise in the highlands of Abyssinia, which are composed of

great beds of rich soil. When the tropical rains come this soil melts down into the rivers to such an extent that it

Northeastern Africa.

fills not only their waters, but even the Nile itself, with rich mud. When the Nile is high the waters flow out over the country, some of the mud drops to the bottom, and this in

time has built up the land of Egypt. The soil varies in depth from twenty to forty feet, and it has been estimated that it rises about six inches every hundred years.

The good land extends just as far out as the water goes, and no farther. Beyond, all is sand and barren rock. A man can stand with one foot entirely hidden in the richest of crops, while the other rests on the barren desert.

On the Nile.

Along the greater part of its course the Nile runs through a trough in the desert, and there the fertile strip is so narrow that we could walk across it in an hour; while at other places it is so wide that it would take us about half a day to go from one side to the other. Until it reaches the latitude of Cairo, the valley of Egypt is nowhere more than nine or ten miles wide, although it is

almost a thousand miles long. Below Cairo it spreads out like a fan, each rib of which is about one hundred miles long, ending at the Mediterranean. This fan is the delta of Egypt, so named from the fourth letter of the Greek alphabet, which has a fanlike shape. The deposits of the Nile are such that the delta grows about eight feet farther out into the Mediterranean every year. It now extends one hundred miles along the seacoast and grows wider and wider.

The Egypt of the map is about seven times as large as New England, but it is mostly desert. The inhabited Egypt, consisting of the delta and the long, narrow valley above it, is all together not so large as Massachusetts and Connecticut combined; but it is so fertile that it supports more people, in proportion to its cultivated lands, than any similar area on the globe. Much of the country produces crops all the year round, and, where irrigated, two and three harvests are annually gathered from the same soil.

Egypt has no rain, but the Nile gives it water throughout the year, and at flood times furnishes it a meal of this rich mud which causes it to produce without other fertilization. When the rains are light in the mountains of central Africa, there are no great floods. Then Egypt suffers from famine. For this reason the people watch the Nile carefully. They measure its rising, from day to day, to see if the water will get high enough to spread out over the country. There is a column in a well on the island of Rhoda, in the river at Cairo, known as "the Nilometer," which marks the flow of the water. Reports are given out from day to day, and when the right height has been

reached there is great rejoicing all over the country, for the people know they will have good crops and a prosperous year.

The Nile begins to swell about the first of June. It increases throughout the summer until October, when it reaches its highest level. The water is now conducted

A Nile village.

over all the farms possible, and allowed to remain until it has saturated the soil and deposited its mud. About the last of October the river falls and the fields become dry.

In flood times the Nile flows fast, and in the past great quantities of water and a vast deal of this valuable mud have been carried far out into the sea without being spread over the land. Now dams have been built to hold

back the water and let it out as it is needed. Some of these dams are among the wonders of the world. One at Assuan (äs-swän′), far above Cairo, is as high as a seven-story house, and so thick that three carriages can be driven abreast upon its top. It is composed of huge blocks of granite, so strongly cemented together that they will hold back a lake one hundred and forty miles long, containing more than a billion tons of water. The dam is filled when the muddy flood comes down from the mountains, and opened again when the Nile is low. As the water lies in the dam, the mud sinks; but as the outlets are along the bottom, when the water goes out it carries the mud with it, and thus distributes it through the canals to farm after farm.

13. EGYPT — A TRIP THROUGH THE COUNTRY

WE have landed at Alexandria and are making our way through the Nile valley. How delightful it is and how refreshing after our long travels in the thirsty Sahara! The land is alive with luxuriant green, the gold of ripening grain, and the warm, black earth freshly turned by the plow.

The fields are inclosed by little mud walls, and the crops are spread out before our eyes in a many colored patchwork, through which run roads, paths, and silvery canals. That field of snow in the distance is Egyptian cotton, in which crop the country competes with our Southern States; the green expanse at the left is clover, which

grows here as luxuriantly as anywhere in the world, and farther on are corn and sugar cane rising and falling under the wind from the desert. We ride through pasture fields where thousands of animals, each tied to a stake or watched over by a herdsman, are feeding. There are camels, donkeys, and water buffaloes; there are flocks of fat sheep and goats, and here and there a horse or mule.

Egyptian peasants.

How busy every one is! Little caravans are going to and fro over the roads. Here comes a drove of donkeys, each so hidden by the bundle of grass upon him that we can see only his ears as he moves along without halter, bridle, or saddle. Behind is a line of camels, each loaded with two bales slung from its hump, while farther back are other camels piled high with grain.

We stop now and then to talk with the farmers. They are of the peasant class, known as Fellahs, forming about two thirds of the whole population. They are the descendants of the ancient Egyptians mixed with the various races which have conquered the country. Many

"The houses are of sun-dried brick . . ."

of them own their farms, little patches often no larger than our village gardens. Others work as farm hands on the estates of rich landowners, scattered over the country. They are generally poor; wages are low, and they earn but a few cents a day.

The people live in villages and go out to their farms. The cattle feed out of doors all the year round, and are often taken into the house with the family at night.

The villages are sometimes shaded by date palms, but often have no trees whatever. There are no yards or gardens. The houses are of sun-dried brick with roofs of straw or palm leaves. Most of them are of one story, and few have more than two small rooms. Near the roof are little square holes which admit the air, serving as windows; the average roof is so low that we can reach it as we sit on our donkeys.

The furniture of one of these houses consists of little more than a few mats, a copper kettle, and some earthenware pots. The bed is a ledge, built in the side of the room. Fires are not needed for heating, and the cooking is usually done out of doors on little stoves of burnt clay.

The ordinary food is a coarse bread of corn, wheat, or millet made up in round, flat cakes. The Fellahs eat vegetables, eggs, cheese, and dates; but they seldom have meat. They sit about on the ground at their meals. They have no forks, and every one eats with his fingers.

The Egyptians dress simply. A man is well clad if he has a pair of short trousers and a gown of blue cotton with a felt cap for his head. Sometimes he twists a scarf about his cap, making it look like a turban, and on dress occasions he may have a pair of shoes of bright-colored leather. The women wear blue cotton gowns, much the same as the men, but most of them have cloths over their heads and long, black veils covering their faces so that only the eyes can be seen. They are straight from the custom of carrying things on their heads.

We see many children sprawling about in the dust near the huts. Some are making mud pies on the banks of the canals, and some herding the donkeys and sheep, driving the animals to and from pasture. The smaller children are half naked, and the babies wear no clothes at all; their mothers carry them about astride their shoulders, instead of in the arms as we do.

Now we have left the village and are again in the fields. Here two men are hoeing, there one is plowing with a camel and donkey hitched up together, and farther on is another driving two oxen in front of a harrow. Down the

road comes a boy on a buffalo; he has neither bridle nor saddle, and sits woman-fashion. The little fellow wears no clothes, and his skin is tanned black by the sun. Buffaloes are used here for all sorts of farm work, and they also furnish milk and meat for the Fellahs.

"Here two men are hoeing, . . ."

Notice the two men standing knee-deep in that canal with a basket-work bucket hung by a rope between them. They are scooping the water from the canal into the bucket, and, with a swinging motion, are throwing it into another canal higher up, so that it runs off over the fields. That is one mode of irrigation which prevails all over Egypt. Tens of thousands of men and boys are always lifting up water in that way from the river or the canals so that it can be spread over the crops. The little mud walls about the fields hold in the water.

There are many other methods of irrigation, and among them the great wheel with jars attached to its rim, such as we saw in Morocco. The wheels move about in the wells

or canals, and, as they turn, raise the water and pour it into troughs, through which it flows over the country. A blindfolded donkey or buffalo keeps the wheel moving, and a boy or girl runs along behind to whip the animal whenever he stops. There are more than fifty thousand such wheels in lower Egypt, requiring about twice that number of buffaloes and donkeys to keep them in motion. Some soils need only the floods to make them fertile and others are irrigated throughout the year.

The climate grows warmer as we go up the river, and the difference affects the seasons of seedtime and harvest. As a usual thing three crops are grown. The winter crop is of grains of all kinds. This is sown in November and harvested in May or June. The summer crop is sown in March, April, and May, when the Nile is low, and harvested in October and November; it is made up of cotton, sugar, and rice. The autumn crop, which is sown in July and gathered in September and October, consists of rice, Indian corn, millet, and vegetables.

In the delta vast quantities of cotton are produced as well as rice, wheat, and Indian corn. Cotton is the most valuable crop, bringing in many millions of dollars a year. The Egyptian cotton has a fiber which is very desirable for certain kinds of cloth, and much of it is imported by our manufacturers. Sugar cane grows well in Middle and Upper Egypt, as do also the various grains and vegetables. The soil is everywhere fertile, and, if it has the rich mud from the Nile, it produces abundantly. Sometimes the seed is scattered on the mud, after the floods, and tramped in by oxen or goats. Most of the year the sun is so warm that the crops ripen quickly.

14. ALEXANDRIA AND CAIRO

EGYPT is one of the oldest countries of the world. The Nile valley is so rich and the river, running through it to the sea, so wide and deep that its people soon began to trade with other nations. They became wealthy and civilized. They had great cities when Europe was still inhabited by savages, and in early ages were so noted for their learning that strangers from everywhere came here to study.

From writings engraved on the old monuments we know that this valley had kings several thousand years before Christ was born. The Bible tells us how Jacob went down into Egypt, and how his son Joseph became the Prime Minister of Pharaoh, one of the kings of that time. The Bible also describes how the Israelites were afterward enslaved by the Egyptians, and made to toil under taskmasters until the plagues came and the king told Moses he might lead his people out of the country.

We are now in Alexandria, on the Mediterranean Sea at one of the mouths of the Nile, just where it is easiest to ship goods from and to all parts of the valley. The city was named for Alexander the Great, who founded it about 332 B.C. after he had conquered the Egyptians. It grew rapidly and became the most magnificent city of its time. Until the route around the Cape of Good Hope was discovered, it was about the only doorway to Africa, and consequently a great center of commerce and trade.

Alexandria was long a seat of learning. Some of the most famous geographers, astronomers, and mathemati-

cians of antiquity lived here, and when Egypt was conquered by the Arabs about 641 A.D. it had the greatest library of the world. The Arab general ordered that the library be destroyed. He said the Koran contained everything that a man ought to know, and therefore other books were not needed. He gave the books to the public bathhouses to feed their fires; and there were so many that it took months to consume them. At that time Alexandria had four thousand palaces, four hundred places of amusement, twelve thousand gardens, and four hundred public baths.

After that the people were converted to the Mohammedan religion, and nine tenths of all the Egyptians are now of that faith. In the sixteenth century the Arabs were conquered by the Turks, and the country is now a dependency of the Sultan of Turkey, being ruled by a governor called the Khedive.

In times past the Egyptians have been terribly oppressed. They have been forced to work for the government without pay, and have been treated quite as harshly by their masters as the Israelites were treated by the Egyptian kings in the days of Moses. Of late years, however, the country has been so in debt to Great Britain that the British have practically taken charge of it, directing the Khedive how to rule. This is a good thing for Egypt. The British see that good order is kept. The peasants are not oppressed, taxes have been reduced, and railroads have been built far up the Nile valley, so that we can travel through most of the country by rail.

We spend but a few days in Alexandria. It is the chief city on the African coast and is still noted for its com-

merce, although its scholarly traits have long since passed away. It has one of the best harbors on the Mediterranean, and more than twenty steamship lines connect it with Europe and other parts of the world. The streets are wide and well paved, with tramways running through them. The business blocks are like those of Europe, and there are many fine foreign buildings in addition to the boxlike houses of the natives.

We stroll about the wharves watching the loading of cotton, sugar, grain, elephants' tusks, ostrich feathers, and other merchandise brought up the Nile valley from central Africa. We then take a donkey ride out over the ground where the great library stood to look at Pompey's pillar, a huge column of granite which was erected as a monument centuries ago.

Pompey's pillar.

A few hours by train brings us from Alexandria to Cairo, the capital of Egypt, the largest city of Africa, and one of the most interesting cities of the world. It lies on the right bank of the Nile, so situated that it is often spoken of as a beautiful jewel joining the handle to the green fan of the delta.

There was a city here many hundred years before Christ, and the present Cairo was founded by the Arabs shortly

after they conquered Egypt. It was made the capital of Egypt centuries ago, and it is to-day, next to Constantinople, the chief Mohammedan city of the world.

The distance between Alexandria and Cairo is about one hundred miles. The delta is level, and rich crops stretch out on each side of the track as far as our eyes can reach. Now we are close to the Nile and now far out from it, winding our way through pastures dotted with cattle, donkeys, and camels, and by the mud villages which are scattered over the plains.

At every stop crowds of queerly clad people rush to the car windows with refreshments to sell. There are barefooted girls and boys in blue gowns; there are women with their faces half covered carrying clay jars of water on their heads; and peddlers wearing red fez caps, who bring us hard-boiled eggs, oranges, dates, bread, and green sugar cane. We bargain with them for some fruit and eat it on the train.

As we near Cairo we can see the desert stretching away on both sides. The minarets of the mosques are visible long before we come into the city, and not far from the Nile on the edge of the desert are the Pyramids, those great masses of stone which were erected as tombs by the Egyptian kings of the past.

At the station we send our baggage on to the hotel and take donkeys for a ride through the city. Each of us has a long-eared, shaggy-haired animal with a high red saddle and a donkey boy trotting behind. The boys are brown-skinned little fellows in bare feet. They wear skull caps and have what look like night gowns of blue cotton stretching from their necks to their ankles. They speak a

little English, telling us the names of their donkeys. One says: "My donkey good donkey. Him name Uncle Sam," and another: "My donkey best donkey. Him name Yankee Doodle." They see we are Americans and

General view of Cairo.

think these names will please us. Each boy carries a rod with which he pokes the donkey or whips it to make it go faster; the little beasts almost throw us off as they jerk their hind legs from one side to the other to escape the rod.

We direct the boys to take us to the foreign part of the city. We wish to see the palaces of the Khedive and his officials, and the wide boulevards and beautiful parks for which the city is noted. We then look at the houses of the wealthy Greeks and Egyptians, and later dine at

one of the hotels built for the many people who come here from Europe and America to spend the winter on account of the excellent climate.

After dinner we rest awhile on the hotel porch, watching the turbaned, long-gowned jugglers perform their magical tricks, and the snake charmers make their poisonous snakes move to and fro to the music of pipes. Ragged musicians play for us, and the strange characters of Cairo pass up and down the street before our eyes. There are business men and travelers in European clothes. There are soldiers on horseback, turbaned sheiks on donkeys, and Bedouins on camels. There are officials in carriages, with footmen running in front carrying the wands of authority to make the people get out of the way. Here goes an automobile, there is a boy on a bicycle, and behind comes a woman driving a donkey load of hens and geese. The fowls are in crates, and they crane their necks out of the slats. Down the street comes a boy with a cow, which he milks from door to door. He has a stuffed calf in his arms and sets this beside the cow when he milks her; he says the cow will let down her milk if any kind of a calf is near by.

Now our donkey boys are ready, and we start on our trip through old Cairo, galloping in and out through the crowd to the oriental section of the city. The houses are like those of the native parts of the African towns we have seen. They are flat-roofed and box-shaped. Many have windows of latticework extending out over the street, and the doors are wonderfully carved. Most of the buildings are white, and nearly all have dark-skinned Egyptians standing outside or peeping out through the

slats of the windows. The streets are narrow and dirty and more thronged than those of other parts of the city.

"Now our donkey boys are ready . . ."

And then the noise and the people! We thought it strange in Algiers and Tunis, but Cairo is strangest of all. We are moving along through a kaleidoscope of many colors and costumes, crowded and jostled by people on foot, and by horses, donkeys, and camels. We are pushed to the wall again and again by the porters, who carry great boxes and bales on their backs, held there by ropes tied around their foreheads. Our guide yells to those in front to get out of the road and warns us to be careful. We go by girls carrying water on their heads in great earthen jars, so carefully balanced that it does not spill as they walk along through the crowd. Blind beggars are picking their way with canes, and peddlers are crying their wares. Some have trays of fruit on their heads and some jars of lemonade on their backs.

The water carriers ask us to drink from their goatskins, and we are besieged everywhere by the beggars. "Backsheesh! Backsheesh! Backsheesh! A gift!" they cry, not only in Cairo, but all over Egypt. From now on we shall find men, women, and children begging wherever we go, the children running beside our donkeys for blocks with their little brown hands outstretched for alms.

We see richly dressed men wearing turbans and gowns, and now and then finely clad ladies with veiled faces going along with black men servants to guard them.

A street in old Cairo.

We spend much time in the bazaars. Above the streets there is matting which shuts out the sun, making a city of stores under one roof. Every variety of merchandise has its own place, and work of all sorts goes on in the shops where the merchants are selling. Here boys and men in red fez caps and long gowns are making cups and trays. They sit at low tables, on which are sheets of brass which they pound into shape. In the bazaar of the carvers, boys squat on the floor and hold the wood with their toes as they cut it, and in the street of the

booksellers, men sit cross-legged and bind curious volumes. We walk through streets where only Persian goods are sold, and pass on to the Indian bazaar, where most of the dealers are Hindoos. There are also Turkish bazaars noted for their fine rugs, bazaars selling watches and jewelry, and others where one can buy sweetmeats, perfumery, and spices.

A street scene.

Every now and then we get down from our donkeys to talk with the turbaned, long-gowned merchants. They treat us politely, asking us to sit on the ledge outside their stores, and to have a cup of coffee with them while discussing the prices. Everything is sold by bargaining, and they always ask more at first than they expect to get.

The time passes quickly, and we go to the hotel for our meals, returning to the native quarter again and again. We visit the mosques for which Cairo is noted. Some of them cover acres, their huge buildings rising high above the rest of the city. Every mosque has a court in it with a fountain, where the people wash their feet and hands before going in; and each has its minaret, on which the

priest stands at certain hours of the day and night and calls the people to prayers. We take off our shoes or put slippers over them before entering the mosques; the Mohammedans tell us we may, if we wish, keep our hats on.

One day is spent at the University of Cairo, the largest of all Mohammedan schools. Here Egyptian boys and men study the Koran, as we saw the Moorish boys doing at Fez. The school is held in a mosque, and the scholars are of all ages, from little boys of four to gray-bearded men of seventy. They are sitting on the floor in groups, all in their bare feet or stocking feet, their shoes having been left outside the mosque. Some of the children are learning to write the Arabic characters, some are committing sentences from the Koran, and they sway back and forth as they sing out the words. One of the first sentences they learn is: "There is no God but God, and Mohammed is His prophet." School is held here all the year round. There are but few holidays and no long vacations. The children begin when the sun rises, first saying their prayers and then studying until noon.

Later we visit some of the Coptic churches. The Copts are descendants of the ancient Egyptians, and have a rude form of Christianity. There are several hundred thousand of them in Egypt. They dwell chiefly in the cities, dressing and living like the Mohammedans. They are usually clerks or scribes. We can tell them by their black turbans and kaftans or vests. The Copts have a language of their own. In Upper Egypt they own most of the land. We shall see people who believe in the same religion in Abyssinia farther on in our travels.

15. ANCIENT EGYPT — THE PYRAMIDS AND THE SPHINX

TO-DAY we are to learn something of the people who lived in the Nile valley many thousand years ago. We shall, in our imagination, go back almost to the beginning of history, and travel in the footsteps of the kings and people of that time. We shall see the Pyramids, the Sphinx, and other monuments; and later, in the Museum at Cairo, the statues of the monarchs who made them, and even the very kings themselves, for their bodies are preserved to this day.

The Pyramids have for ages been considered among the wonders of the world. They are enormous monuments of stone, built as tombs by the Egyptian rulers, four or five thousand years ago. The remains of fifty or sixty Pyramids have been found in different parts of the Nile valley, and the three largest and best preserved are here in the desert, about eight miles from Cairo. One of these, the Great Pyramid, was constructed by Cheops, who was king of Egypt more than three thousand years before Christ was born.

In going to the Pyramids we cross the Nile over a magnificent iron bridge guarded by bronze lions, and ride upon an electric railway through a long avenue of acacia trees, the branches of which intertwine overhead, forming an arbor reaching clear to the desert. The road is above the fields, and the green stretches away to the north and south as far as our eyes can reach, while in front is the end of the arbor, a patch of light as big around as a drum head. That patch is the desert.

". . . we cross the Nile over a magnificent iron bridge . . ."

Shortly after leaving Cairo we see the Pyramids through the trees. They seem small at first, but they grow rapidly as we come nearer, looking like three huge piles of stones standing out against the blue sky. It is not until we leave the cars and walk over the sand to them that we can appreciate their immensity. Now we are in front of the Great Pyramid. As we look up, it seems as though the whole sky were walled with stone. The top towers high over us, almost kissing the white clouds which to-day are floating in the clear blue of the Egyptian heavens.

The Great Pyramid was once four hundred and eighty-two feet high; and, although a vast deal of it has been carted away to make buildings for Cairo, it is still about four hundred and fifty feet high. Its base covers nearly thirteen acres, and its top is a platform so large that a good-sized house could be built upon it. It is an almost

solid mass of stone, made of great blocks which are piled up in the shape of steps, growing smaller in size as they rise.

Herodotus, the Greek historian, tells us that this monument was built by forced labor; and that it took one hundred thousand men twenty years to construct it, while ten years were required to make the road to transport the stones, the most of which came from the Arabian mountains and were ferried across the Nile. When Cheops died he was buried with his queen inside the pyramid, separate rooms having been made for the queen and himself.

We climb to the top, each assisted by three Arabs, who pull and push us from one great stone ledge to another. There are about one hundred and fifty layers of stone, each on the average about as high as a dining table, so that if our friends at home will go to their dining rooms and climb upon the table one hundred and fifty times, they will appreciate something of the work we do in climbing this pyramid. They will not be helped, however, by the black-skinned Arabs, who almost jerk our arms from the sockets as they drag us from one ledge to another.

"We climb to the top, . . ."

We also go inside and with flashlights take photographs of the rooms in which the bodies of the king and queen were laid. Each is as big as the ordinary schoolroom, and the coffins, made of great blocks of granite, are of just about the right size to contain the body of a man.

We are tired when we get down to the desert, and are glad to hire camels to ride across the sands to the Sphinx, another mighty monument erected by the kings of those days. No one knows just how old the Sphinx is nor why it was made. It is an enormous figure, with the crouching body of a lion and the head of a man, cut out of a solid block of rock. The figure is as high as a five-story house and so large that it would about cover the ordinary city lot. Its body is one hundred and forty feet long and its fore legs measure fifty feet. The head of the Sphinx is so large that it would fill an ordinary schoolroom. A man standing on the tip of its ear could not reach to the crown of the head. The ears are each four feet long, and the nose measures more than five and one half feet, while its mouth is so big that, if it were open, an ox or a camel could be put inside it.

The face of the Sphinx is now somewhat mutilated, for it has been shot at by the Arab soldiers and has been worn away by the sands of the desert which have been blowing upon it for five or six thousand years. As we climb upon the great body we wish we could whisper in its ear and ask it to tell us the riddle of its existence, and something about the strange people who chiseled it out of the rock.

All about the Sphinx and throughout the desert near Cairo are the remains of ancient monuments. Great

chambers have been found under the sand, in which mummies, jewelry, and other things were stored. Other chambers and pyramids exist farther up the Nile on the site of Memphis, which was a capital of those ancient kings, but which has now passed away. There are other wonder-

The Sphinx.

ful ruins at Thebes and Karnak in Upper Egypt, including the remains of temples and avenues lined with sphinxes, and there are also huge statues and other ruins which show us that the ancient Egyptians were a civilized people.

Going back to Cairo, we drive out to see the obelisk on the site of Heliopolis (hē-lĭ-ŏp′ō-lĭs), the old City of the Sun. This place was noted for its learning thousands of years ago, and it is supposed that the obelisk was here long

before Jacob came down into Egypt. It stood on one side of the entrance to the Temple of the Sun at the end of an avenue of sphinxes. We look in vain, however, for the remains of the palaces, temples, and schools. The obelisk is surrounded by green fields, and two blindfolded buffaloes are moving a water wheel at one side of it, while beyond are the yellow sands of the desert with the Pyramids rising above them.

A mummy.

In the Museum at Cairo we see scores of mummies which have been found in the tombs. These mummies are the real bodies of the ancient kings, so treated with ointments that they have not crumbled to dust. The limbs are wrapped around with many cloths, and some faces are so lifelike that it seems as though they might talk. We look at a princess who may have been the one who found little Moses in the bulrushes; and linger long before Rameses, the mummy of an Egyptian ruler whose body has been preserved.

In other rooms we examine articles taken from the tombs. There are gold bracelets and rings like coiled snakes, similar to the jewelry of to-day. There are fish-hooks like the ones we use now, trinkets for the toilet, writing materials, and other things which show us that the Egyptians of four thousand years ago were not far different from us.

16. A TRIP THROUGH THE SUEZ CANAL

WE have come from Cairo to Port Said (sä-ēd′) on the Mediterranean Sea to make a trip through the Suez Canal, before starting on our long journey up the Nile. We are now at the northeastern corner of Africa, on the

Port Said.

Isthmus of Suez, that little tongue of land which for ages blocked what is now one of the great commercial water routes of the world.

Until a few years ago, Africa was a peninsula tied to Asia by this narrow isthmus. Then the canal was cut through, and the continent became an island.

Do you realize how important this was to the commerce of the world? For ages this Isthmus of Suez was the locked gate on the shortest water route between Europe

and India, China, and Japan. Ships could sail in from the Atlantic and across the Mediterranean to this place, and they could come through the Indian Ocean and up the Red Sea, but here they were stopped. The isthmus is a strip of sand so narrow that a railroad train could cross it in a couple of hours; but it was as great a barrier to navigation as though it had been the Alps or the Andes. The result was that all vessels carrying goods to and from Asia had to sail clear around the Cape of Good Hope,—the southern end of the African continent. The distance was as great as halfway around the world, and it took many weeks to make the voyage.

From time to time men suggested that the isthmus might be cut through; but it was not until about the middle of the last century that anything was done. Then a French civil engineer, Ferdinand de Lesseps, brought forth plans for the work; and the French, aided by the Egyptians, cut this great trench through the desert, and the waters of the Mediterranean and the Red Sea flowed together.

The trench is eighty-six miles long, and so wide and deep that great steamers can sail through. Harbors were constructed at both ends of the canal to accommodate the shipping, parts of the trench were walled with cement to keep back the sand, and at every few miles great basins were made for ships to enter while other ships passed them.

The canal cost more than one hundred million dollars, and it took ten years to make it. Twenty-five thousand Arabs and Egyptians were kept working upon it, and four thousand casks of drinking water were daily carried across the desert on camels to supply them. Then a small canal

was dug from the Nile, and this is still used to give fresh water to the people who live along the Suez Canal.

Some of the land along the canal was found to be below the level of the sea. Those parts needed but little digging, and when the canal reached them the salt water flowed in and made lakes there. About two thirds of the whole distance across the isthmus is now taken up by the canal proper, and the other third by such lakes.

As soon as the canal was completed, most of the steamers sailing between Asia and Europe began coming this way. The saving in miles for nearly all of them is greater than the distance from our country to China across the Pacific, and there is also a saving in money, although the canal officials charge high rates. Every ship has to pay a heavy toll, in proportion to its size and the number of its passengers.

The Suez Canal is open to ships of all nations; it is now used by three or four thousand ships every year, and several hundred thousand passengers annually ride through it. There is so much travel that the water way is overcrowded, and as it has proved to be a profitable undertaking, it is now planned to build another canal by its side.

We find the harbor at Port Said full of steamers, which are waiting to enter the canal or have stopped to coal upon coming out. A ship from India, loaded with grain, lies at one wharf, and near it is a vessel from Australia with a cargo of wool. While we wait an English ship carrying the first tea of the season from China to Europe passes by, and an American gunboat on its way to the Philippines starts into the water way.

We take passage on a vessel for Suez, and are soon steaming along through the desert. We go slowly, for the ships are not allowed to move faster than five miles an hour; and at the wider places we frequently receive a signal from one of the stations on the shore to wait until a steamer goes by.

Now we pass a great dredge which is pumping up the sand from the bottom of the canal and throwing it out upon the banks; and now go by one of the small towns which has grown up to accommodate the laborers who are employed on the work.

The canal is so narrow that the ships in the distance seem to be walking, as it were, in single file through the desert. We are close to the shore most of the way, and the dry, thirsty sand looks drier than ever in contrast with the sea-green water below.

We pass caravans of camels trotting along, their riders bobbing up and down against the clear sky, and at one time in the hazy air of the desert see what looks like a city, shaded by palms, afar off over the sand. It fades away as

". . . steaming along through the desert."

we go onward, and we learn that it had no existence; but was merely a picture of the air, the mirage so often seen in desert lands.

We stop at Ismailia, a little town midway through the canal, where De Lesseps lived while it was building; and soon after that enter the lakes, scaring up some pink flamingoes which are resting on the shores. The trip takes us all day and far into the night, but we finally reach Suez, whence we go back to Cairo by train.

17. NUBIA

FROM Cairo we travel by steamer far up the Nile, stopping at the chief towns along the banks. We visit Assiout (äs-sē-o͞ot′), the capital of Upper Egypt, a thriving city of fifty thousand people; and thence steam

"We visit Assiout, . . ."

on to Assuan, where the great dam is. We explore the ruins of mighty temples built by the Egyptians of the past; and then sail on for days, until we at last reach Khartum (kär-to͞om′), the chief city of Nubia, at the junction of the waters of the White Nile and Blue Nile.

The valley narrows as we go southward. We are often

close to the desert and sometimes between rocky hills and strips of green marking the banks of the Nile. Everywhere half-naked men and boys are raising the water and pouring it into ditches, through which it is conducted over the land; everywhere are the same mud villages shaded by date palms which we saw in Lower Egypt; and everywhere donkeys and camels, and about the same people we traveled amongst in the delta.

Still farther southward the natives are poorer and the villages meaner. There are more negroes in the crowd which comes out to the steamer, and the people are wild and savage. We pass dark-faced Nubians on camels who have ridden in from the desert, and now and then meet some redolent of the castor oil or tallow which they have used to grease their bodies and hair.

". . . dark-faced Nubians on camels . . ."

We are now in Nubia, or the Egyptian Sudan, the long strip of arid plains, largely desert, through which the Nile has cut its way down to Egypt. The country is tributary to Egypt, and is therefore controlled by the British, many of whom we find at Khartum. This is important, for it is through Nubia that a part of the Cape to Cairo Railroad,

A port on the upper Nile.

planned to run north and south through the whole continent of Africa, is to be built. We have seen cars puffing along the banks of the Nile as we came up to Khartum. The railroad already extends from Alexandria to where we now are, and railroads have been built from the Cape of Good Hope northward for many hundreds of miles. By and by lines will be constructed connecting these roads with Khartum, branches will be built to the east and west,

and one will then be able to visit most parts of this wild continent by rail.

At present the only way of getting about through Nubia is on the rivers or by caravan. Much of the country is thinly settled. The Nubians live in villages of tents or thatched huts, moving about with their herds of cattle, camels, donkeys, sheep, and goats from pasture to pasture. Where the water is plenty, they raise tobacco, millet, and other grains; but in general they are herdsmen, relying upon their cattle for support.

The Nubians are of several races, each of which has its own language. They have many tribes, ruled by sheiks or chiefs. They are Mohammedans and make pilgrimages to Mecca, the birthplace of their prophet, Mohammed.

We are surprised at the Nubians. We knew they were black and thought they might be like negroes. They are far different, although their skins are jet-black or dark brown. They have features like ours, with noses as straight and lips almost as thin as our own. They are tall, straight, and wiry. They are said to be strong and are so proud of their power of bearing pain that the young men sometimes engage in flogging matches to see who can endure most. Such matches are held in the presence of the young women of the village, who play a quaint music while the contest goes on. The young men step into the ring two at a time, each clad in a single cloth about the loins, and armed with a long whip of hippopotamus hide. As the music strikes up the two begin to flog each other. The whips make the blood come, and they continue the struggle until one falls exhausted. The man who can stand up the longest against all his fellows is considered the best. He is entitled to

marry the belle of the village; he is the favorite of the women for some time thereafter, and bears the proud title of "The brother of the girls."

It is so warm in Nubia that one needs but little clothing. Small children go about naked, and many of the older people wear only a strip of cotton cloth about the waist, which falls to the knees.

The most peculiar thing about the Nubian is his hair. It is so dressed that it stands out in a great mass or brush on the top, with a fringe of braids hanging down about the neck, covering his ears. Hairdressing is the most important part of his toilet. The hair must be stiff to hold its shape, and the stiffening usually consists of tallow taken from a freshly killed sheep. The best fat is that which has been well chewed by human teeth, and at each dressing the family and friends are called in to chew tallow. When the fat is properly mixed, it is rubbed in and the hair combed after the latest style.

"The most peculiar thing about the Nubian is his hair."

In the desert parts of the Sudan the bathing is quite as curious as the hairdressing. Water is scarce, and tallow takes its place. The person to be bathed stretches himself at full length upon a mat and is then rubbed from head to

foot with mutton fat, scented with musk or other perfumery. After this the body is well kneaded, the arms, legs, and every part of it being rubbed and squeezed; this process gives one, so the Nubians claim, a more delightful sensation than a hot water bath.

Let us visit a village and see something of the Nubians at home. The huts are inside a fence, put up as a protection from robbers. Each hut is circular in shape. It is low and has a conical roof. There are neither windows nor chimneys, and the light comes in through the door. The floor is the ground, and the only ceiling is the covering of thatch which forms the roof. There is little furniture. There are no chairs nor tables. The people sit on the floor and more often outside the huts. A rude bedstead with a mattress of ox-hide strips stands in a corner, and some goatskin bags, a granite slab, a clay griddle, several earthenware pots, and some beautiful baskets are piled up at one side. The granite slab is the mill of the family; upon it the millet and other grains are laid and pounded or crushed to a flour. The pots, griddle, and baskets are the cooking utensils. The pots are for soups and stews, on the griddle is fried the sour bread which forms one of the chief foods, and the baskets are the water buckets of the family.

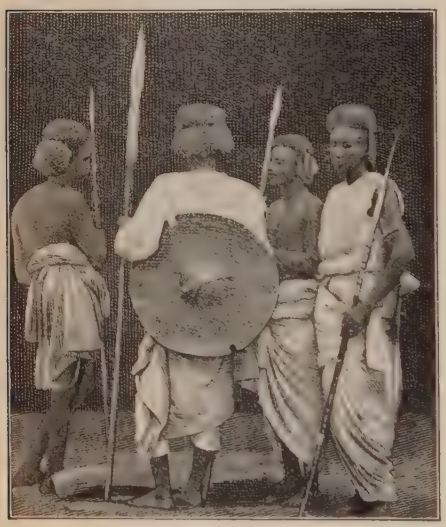
But how can one carry water in a basket?

He can not in baskets like ours, but these are different. They are made of straw so tightly woven that they will hold water. They are used as milking pails, too, and sometimes milk is boiled in them.

But will not a straw basket burn if one holds it over the fire?

Yes, but the Nubians do not boil milk in that way. They set the baskets down on the ground and drop hot stones into them, putting in more and more until the milk boils. They cook meat on red-hot stones, turning it from side to side until it is thoroughly done.

The people are hospitable. They give us what they have and often refuse to take pay, although they accept our presents on leaving. We find it especially difficult to pay them for milk; for the Nubians think that if one takes money for it, his cows will go dry.



"We see many men with lances and shields."

These people are fond of their cattle. Each animal has its own name, and every herd has a cow known as the lucky one, whose milk is considered better than that of the others. The cattle are small, with humps on their shoulders, like those of India. They are trained to life in the desert and can go as long as two days without drinking.

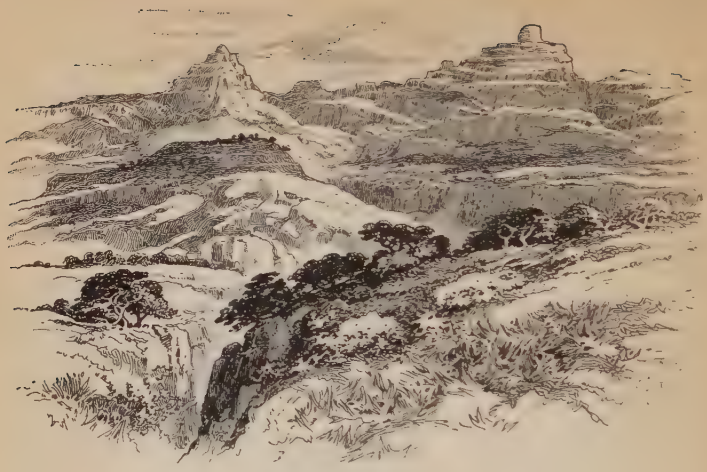
We see many men with lances and shields. The Nubians are brave warriors, and skillful in hunting and trapping the big game found in the wilder parts of the country. They catch rhinoceroses, hippopotamuses, and

wild boars in pits so made that if the beasts fall in they can not get out. A sharpened post is often fixed in the ground in the center of a pit. The animal falls upon this and is killed. Such pits are covered with a thin net, upon which branches and leaves are spread.

They sometimes kill an elephant by slipping up and chopping an artery of one of his hind legs with a sword. As his blood flows away, the beast grows weaker and weaker, and finally drops dead. The hunter must be careful lest the animal give him a blow with his trunk, and he has to be spry or he may be crushed to death with the tusks or huge feet.

Among the most interesting of Nubian sports is ostrich hunting. Ostriches are found in large numbers in the desert, and are chased by parties of three or four men on horseback. The men look first for the nests, and when they find one with an ostrich sitting upon it, they station themselves near it on their horses at some distance apart. Then one rides toward the nest. As soon as the ostrich sees him, it jumps up and runs away with all its might. For a short distance it can go much faster than a horse. It usually travels for a couple of miles in a straight line and then circles around so as not to get far from its nest.

Now one of the men gallops after the ostrich until his horse is tired out. He then gives a signal and another of the party on a fresh horse starts in, and so they go on until the great bird drops exhausted to the ground. Now the hunter jumps down and chops off its head with his sword. He seizes the long neck and thrusts it deep into the sand, that the blood may not soil the precious feathers.



"... on the high plateau of Abyssinia ..."

18. THE ROOF OF AFRICA — ABYSSINIA

WE have been climbing for days since we left Nubia, and are now on the high plateau of Abyssinia (ăb-ĭs-sĭn′ĭ-ȧ), on what might be considered the roof of the continent. There are some higher mountains still farther south; but Africa has no other country on the average so high as this. The mean level of the plateau is more than half a mile higher than Mount Washington, with great snow-capped mountains as tall as Pikes Peak rising above it.

Abyssinia is so beautiful that it has been called the Switzerland of Africa. It is more than fifty times as large as Switzerland, and in some respects far more beautiful. The plateau is made up of tablelands rising one above

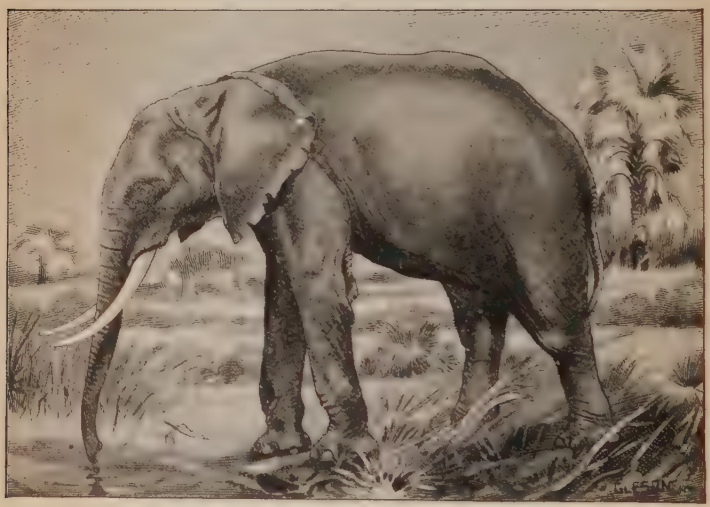
the other. Here a great gorge cuts its way through, there the plain falls off in a precipice a thousand feet deep, and some miles farther on it rises in bluffs to the plains above. In almost the center of the country is Lake Tsana (tsän'à), and down the sides of the plateau and running through it, now falling in cataracts and now raging in torrents through narrow canyons, flow great rivers, some of which lose themselves in the sand; and others, such as the Atbara and the Blue Nile, go on to the Nile proper, giving food and water to Egypt.

We have already seen how Egypt is the child of Abyssinia in that its rich soil, carried down by the rivers, has been spread over the desert. What must be the nature of a land that has furnished such soil year after year and age after age? It must be very rich, must it not? That is the character of Abyssinia.

We might consider this country an island of the richest soil rising high above a sea of deserts and swamps. Situated in the tropics, the water-laden winds of the Indian Ocean strike its cold mountains, so that at certain seasons the rain comes down in torrents, washing the soil into the valleys and filling the rivers which spread it over the country below.

We notice the wonderful fertility of the land as we travel from place to place. The plateaus rise one above the other, each having its own plants, trees, and flowers. In the lowlands it is hot, and there are jungles of bamboos so dense that it is almost impossible to make one's way through them; there are fields of sugar and cotton and the fruits of the tropics. Higher up coffee is grown, and still higher all the plants and grains of the temperate zone.

In many parts of Abyssinia coffee grows wild. It thrives especially in one province, and from there, it is said, the first coffee beans were carried long ago to Arabia, and thence spread all over the world. The name of this province is Kaffa, and from it comes the word "coffee." The natives there do not cultivate the coffee plants, but the soil is such that the plants grow into trees so large that they are sometimes cut down and made into boards.



African elephant.

The soil of Abyssinia is so rich in places that it gives four crops in one year. The people are lazy and plant only enough for their needs. They raise little patches of corn, wheat, durra, sorghum, and canary seeds, which they grind into flour for bread.

Much of Abyssinia is like a great park, with clumps of trees here and there; it has pastures so rich that they sup-

Abyssinians with the lions given to our president.

port large flocks of sheep and goats and droves of ponies and donkeys and fine cattle with humps on their backs. These pastures make the country a fine place for game. There are thousands of antelopes, zebras, and ostriches, and so many elephants that one sometimes sees a hundred marching together through the woods.

There are hippopotamuses in the rivers, and we must be on our guard against the hyenas, leopards, and lions as we go through the forests. The Abyssinians are famous lion hunters, and some of the warriors wear lion skins on their shoulders. When the President of the United States sent an embassy to Abyssinia a few years ago, the king of that country ordered two lions to be sent back to him as a present. There are many wild birds with beautiful plumage, and bees are so common that the favorite drink of the people is a fermented mixture of honey and water.

The Abyssinians are not unlike some inhabitants of the Sahara. They have black or brown faces with features much like our own. They are tall, straight, and fine-looking. They dress in cottons, many of which come from our country. The men wear long robes of white with a red stripe a foot wide woven through the middle. Under this robe they have shirts and tight drawers. The richer men have cloaks of silk or velvet thrown over their shoulders, and a few wear lion skins as signs of rank.

The poorer class of Abyssinian women wear white cotton dresses; they go barefooted and often bareheaded, although some have shawls tied about their heads. The richer women often travel upon mules, accompanied by soldiers. Their dresses are usually cotton, although some have capes of black satin and broad-brimmed felt hats over which they wear veils of silk. Both rich and poor have a cord around the neck, to which are tied crosses, ear picks, and charms. The children dress much like their parents, except in the hot lowlands, where they wear almost no clothing.

The Abyssinians live in small villages of round huts made of poles thatched with leaves and grass. There are but few towns, and about the only place that can be called a city is the capital, where the king lives. This, during recent years, has been at Adis Abeba (ä′dĭs ȧ-bā′bȧ), in about the center of the country. It lies on a high plain with a mud wall around it, and it is more like a great camp than a city. Its houses consist of these same round, tent-shaped mud huts and a number of large buildings which are the palaces of the king.

Although Abyssinia is ruled by a king, there are many

tribes each of which has its own chief and underofficials. The king has a large army, and he expects every one of his subjects to be a soldier. Boys are taken into the army long before the age at which our boys leave school. At eight or ten each boy becomes a servant of a soldier. He walks before the soldier in time of peace, carrying his gun, which he is expected to keep clean and in

Abyssinian soldiers.

good order. He helps take care of the horse and mule of his master, and learns to walk far without tiring. We try a race with some of the boys and find they outrun us. They climb up hill and down at great speed, keeping along with the troops on the march.

During our journey we meet beggars hobbling about upon crutches, and are surprised to see some with only one hand and one foot. We ask whether they have lost their limbs fighting, and are told that they are so

maimed because they were thieves. The first time a man is caught stealing he is whipped, the second time his hand is cut off, and if he steals a third time and is found out he loses one of his feet. The same punishment is given deserters from the army.

Although Abyssinia is so rich, its products are small. The chief exports are coffee, gum, and wax, and also gold and ivory, the trade in which is controlled by the king. The business is done in markets held from time to time in the various villages. The natives for miles around come to such markets to buy and sell their cattle and grain.

The money used in trading is different in different parts of the country; but one can buy goods everywhere with salt or cotton cloth. The salt comes from a dry salt lake near the Red Sea. It is made in bars about a foot long and two inches thick. If the bar is cracked or chipped or does not ring right, the people will not accept it. Every one carries some of this money with him, and when two persons meet each breaks off a piece of salt and offers it to the other, just as some of our people offer their friends cigars. Each eats the salt, and then, bowing low, goes on his way. We soon fall into the custom and carry salt sticks in our pockets, as strangers often ask us to have a bite of salt with them upon meeting.

The cotton money is white cloth imported from America. In addition to this there are silver dollars worth about fifty cents, gun cartridges which pass for two or three cents apiece, and, far back in the interior, strips of iron each worth one or two cents. We carry some of all kinds

of money with us, and have no trouble in making our way, as we have a permit from the king to go through the land.

We buy ponies and mules, and ride from place to place. There is only one railroad, and that is from Jibuti (jē-bo͞o-tē′) on the coast to the town of Harar (hȧ-rär′) in the southern part of Abyssinia. The country roads are mere tracks, and much of our way is up and down hill.

We have little trouble about food. We shoot game on the way, and buy chickens, mutton, and beef in the native markets. We do our own cooking, for the Abyssinians prefer their beef so rare that raw meat is served at nearly every feast. They put red pepper on such meat and sometimes make pellets of raw beef filled with red pepper and onions and eat them. Their bread is in thin, flat cakes of about the size of a handkerchief; it is damp, flabby, and often sour.

The common Abyssinian eats sitting cross-legged or squatting on the floor, and at each meal he has a pile of these bread cakes beside him. He uses the top one as a napkin. The second he folds up and dips into a bowl of melted butter in which red pepper is mixed, and when it is well soaked he squeezes it up in his hands and crams it into his mouth. He consumes his meat in large slices, putting one end of the slice in his mouth and cutting off as much as he can hold there by a stroke of his knife or sword, the other end of the slice being held in the hand. Soup is often served with meat. In such cases the bread is soaked in the soup, and the meat is then taken out and laid on the soaked bread. At the feasts of the better classes, servants are

sometimes required to eat a bit of each dish before the others partake, to show that it is not poisoned.

These people have a low state of civilization. There are no schools to speak of, and but few can read and write. They have their own calendar, dividing the year into twelve months of thirty days each and adding five extra days at the end to make the year come out even. The last five days are holidays. Every leap year they have an extra holiday.

Abyssinian schoolboys and teacher.

The Abyssinians are Christians; but they are superstitious, their religion being somewhat like that of the Copts of Egypt. We visit the churches and listen to the dark-faced priests singing the service while other priests go about through the audience swinging urns in which incense is burning. Each priest wears a robe decorated with silver. Sometimes the bishop carries about a silver cross and allows each of the worshipers to kiss it. There are no seats in the churches, and every one stands leaning on a stick while he listens. We are handed leaning sticks as we come in; and the girls are told to go on

one side of the church with the women, while the boys are led to the other side with the men, a white curtain separating the sexes.

19. ACROSS BRITISH EAST AFRICA BY RAIL

WE make our way from Abyssinia down to the sea-coast, traveling through the land of the Somali (sō-mä′lē), a semisavage race of blacks who inhabit the desert lands along the coast about and south of the Horn of East Africa. Their country is large, being controlled in different parts by the French, Italians, and British. The natives are not unlike the people we saw in the Sahara; they have herds of camels, goats, and sheep, and move about from place to place seeking pasture. Some tribes have villages of rude huts with walls of basket work and roofs of woven thatch. The doors are hinged at the top instead of the sides, so that they can be raised to form an awning during the heat of the day.

A native.

At the coast we take passage on a ship and sail past Cape Guardafui (gwär-dȧ-fwē′) at the tip of the Horn, and

thence on south until we reach Mombasa (mŏm-bä′sȧ) on the little island of Mombasa close to the mainland. We are now four degrees south of the equator, in one of the most bustling places of this part of the world. Mombasa is not only the capital of British East Africa, but also the

Somali village.

port for the important British state of Uganda (o͝o-gän′dȧ), which lies in the highlands about as far inland from the Indian Ocean as Ohio is distant from the Atlantic.

The British have a vast amount of land on this continent. We have seen how they practically control Egypt and that part of Nubia south of it along the course of the Nile. Their province of Uganda south of Nubia includes the best of the highlands about Lake Victoria from which the Nile comes, so that they now practically control all the

land along that mighty river from its source to its mouth. Uganda alone is twice as large as Ohio, and British East Africa, which is between Uganda and the Indian Ocean, is ten times as large as our State of Indiana. Both provinces have much valuable land which the British are opening up to development and trade. They have built a railroad from Mombasa across British East Africa to Lake Victoria, so that we can travel to the highlands of Uganda by comfortable cars.

We first explore Mombasa. It is a thriving little city with good hotels and playgrounds for cricket, football, and other sports. It is inhabited by people from Asia, Africa, and Europe. The Africans are Mohammedan traders, in turbans and gowns, and black-faced people from the mainland, who act as servants and do most of

A street in Mombasa.

the hard work. The Asiatics are largely brown-skinned Hindoos, who have come from India to engage in store-keeping and banking, and to act as clerks on the railway. The Europeans are British officials and merchants, and also Germans and French who have come here to trade.

Many of the natives are almost naked, although they delight in jewelry of different kinds. The women have holes in the lobes of their ears and often along the whole outer rims, and wear buttons of gold, silver, and other metals in them. Some have nose rings, and some have buttons in their nostrils. Many of them look like negroes, and others, not so black, have features almost as regular as our own.

Leaving Mombasa by train, we cross the bridge over the strait to the mainland, and are soon on our way through the wilds of eastern Africa. The railroad is a narrow gauge, and the cars are quite small. Now and then we pass a train loaded with tusks of ivory, bales of hides, india rubber, and also cattle, sheep, donkeys, and goats. We learn that horses, mules, donkeys, sheep, and goats are often carried on the same train with the passengers. A horse goes as a first class fare, a donkey pays second, and a sheep or goat is carried at the third class rate. This may be different as the traffic increases.

Now we have left the seacoast and are far back in the country climbing the hills. We rise rapidly and at Kiu station enter the Athi plains, a vast rolling country covered with grass supporting countless herds of game. We cross these plains to Nairobi, the most important railway and military station upon the line, where we stop a few days to enjoy the beautiful scenery. Mount Kenia

(kē′nē-ȧ) and Kilimanjaro (kĭl-ē-măn-jȧ′rō) can both be seen from Nairobi, and the climate is delightful.

Going onward, we rise to a distance of more than a mile and a half above the sea, passing through the great Rift valley, and then descend to Port Florence situated on the shores of the great Victoria Nyanza (Nyän′zȧ).

Zebras.

Most of our journey is through the wilds, now over plains and now through dense forests. We pass many native villages and strange people curiously dressed who stand and watch the train as it goes whizzing by. Now an ostrich races along almost even with the car windows, and now we see a great herd of striped zebras galloping away. In crossing a stream we surprise a hippopotamus wading along the marshy banks, and the conductor tells us that rhinoceroses have at times charged the locomotives, and that when the road was building one

butted a caboose that stood on a down grade so that the brakes loosened and the cars smashed into a little railroad station, half wrecking it. There are also antelopes of different kinds, and at night we hear the hyenas howling out their hoo-yee-yoo!

The natives are strange in the extreme. We pass villages of low huts built in a circle, so that the cattle can be kept inside at night. The houses are long and narrow, with doors so arranged that the sheep and goats run in and out at will. Some villages have fences of thorns about them to keep out the wild beasts. We see cattle and sheep feeding, watched by dark-skinned shepherds, and now and then a warrior, his head decorated with ostrich feathers and his body painted to make him look fierce. He carries a shield, lance, and sword, and might be dangerous if we met him alone in the wilds.

Boy with ear plug.

The natives gather around the cars as we stop at the stations. There are black-skinned men and boys with great holes in the lobes of their ears, in which pieces of wood or other things are inserted; and girls with shaved heads who wear as ornaments telegraph wire wrapped around the legs, arms, and neck so tightly that only a blacksmith can remove it. Some are dressed

in calicoes, and others have bullock hides wrapped around them. In another province the women wear short petticoats of bark cloth.

The children have almost no clothing, but even the little boys have holes in their ears so big that they can put

Girls with wire ornaments.

two fingers through them. These people inhabit the slopes of Kilimanjaro and Mount Kenia, and the high plateau region between them which is rich in forests and pastures. They are noted as cattle breeders and as warriors.

Farther east we see other strange races, each having its own customs and dress, and at the end of the road at Port Florence upon Lake Victoria, the people are if anything stranger than ever.

20. ABOUT LAKE VICTORIA

BEFORE we go farther let us stop and think just where we are. We have been traveling so fast that our brains have grown tired in trying to understand all we see. Everything is new and different from what we expected. We are on the hot continent of Africa and not far from the equator; but the weather is pleasant, and the breezes from Lake Victoria are cool. We are on a high rolling plateau with mountains rising here and there far above it. To the east and south is Kilimanjaro, so far away that we can not see it. It is one of the tallest mountains in Africa and among the great mountains of the world. Although near the equator, its top is crowned with perpetual snow. Farther northward, between us and the coast, is Mount Kenia, almost as tall, and on the west, on the other side of Uganda, are the Ruwenzori (roo-wĕn-zō′rē) Mountains, which some say are quite as high if not higher than Kilimanjaro itself.

All the land about us is far above the level of the sea. It consists of rolling plains, with gorges here and there running through them, and great troughs and basins in which are some of the largest lakes of the world, such as Lake Tanganyika (tăn-găn-yē′kä), lying between German East Africa and the upper Kongo, Lake Albert Edward and Lake Albert on the west of Uganda, Lake Rudolf in British East Africa, and Lake Victoria, the northern half of which belongs to the British and the southern half to the Germans.

Lake Victoria is larger than Lake Huron, almost three

times the size of Lake Erie, and next to Lake Superior, the largest lake of the world. Its waters have a deep blue color when looked upon from a distance, but they are as clear as crystal and sweet to the taste.

The banks of the lake are grassy hills and rugged rocks. In some places near the shore the water is shallow, and

"... we see beds of papyrus reeds, ..."

there we see beds of papyrus reeds, the lairs of hippopotamuses and crocodiles. There are many large islands, some of which are inhabited by half-naked people, and also floating islands of papyrus reeds, patches which have been torn loose from the bed of the lake and move to and fro with the current.

The British have steamers here, and we make an excursion on one of them, calling at the villages along the shore. At some places the natives are fierce, and we hardly dare land. They stone us with slings, and shake their spears at us. At other ports the people are more friendly, and we are treated to roast kid, clotted milk, bananas, and sweet potatoes.

In Kavirondo (kä-vē-rŏn′dō), northeast of Lake Victoria, the natives go naked, although they twist iron wire about their arms, necks, and ankles as ornaments. The women shave their heads. They have bracelets of ivory and necklaces of shells. In Usoga (o͞o-sō′gȧ), the next province, almost all the people are dressed; the women wear bark petticoats, and the men have clothes of bark or cotton. In another province near by the girls wear a string of beads about the waist until they are married, when they put on bark-cloth skirts. On the west of the lake some of the people wear clothes of grass and skins. We shall find new and odd costumes at every few miles.

". . . little round huts with conical roofs . . ."

The villages of this part of the world are much alike. In Kavirondo they are made up of little round huts with

conical roofs thatched with grass; and in Usoga the ordinary house makes one think of a haycock. There the villages are often surrounded with fences of thorn bushes to keep out the wild beasts, and the houses are built in a circle about an inclosure where the cattle, goats, and sheep

"Ripon Falls . . . the birthplace of the Nile."

are kept at night. They sometimes sleep in the huts with the people. We see many such animals near the villages on the banks of the lake.

In our tour of the lake we first make our way to Napoleon Gulf at the north to visit the Ripon (rĭp′ŭn) Falls, where the waters flow out, forming the birthplace of the Nile. The falls are not more than thirteen feet deep, and the river below is about thirteen hundred feet wide. Here we can stand on the high banks and look down upon the Nile at its

beginning. Great fish are leaping high into the air, and dark-skinned natives are standing upon the rocks spearing them with harpoons as they jump. We are surrounded by green forest trees, in which odd birds sing. The rocks through which the waters flow are covered with white, the guano of the cormorants and other birds which make their homes here.

We next cross Lake Victoria to the mouth of the Kagera (kä-gā′rà) River, the largest stream that flows into it and therefore said by some to be the real source of the Nile. We travel some distance up this river through lands inhabited by black people scantily dressed in skins and aprons of grass. They are barefooted and bareheaded. Some have tattooed breasts and arms, and others shave their heads in patches so as to leave rolls of hair on parts of the head. They are excellent blacksmiths, and we buy some of their spears and knives to take home as trophies.

Nearer the lake are more people dressed in bark clothing, and at one of our stops we have an opportunity to see how bark cloth is made. The cloth comes from a stately tree with small green leaves, a straight stem, and many branches. The bark is taken off by making two cuts around the trunk, several feet apart, and then a third cut down the trunk between them. By this means a cylinder of bark is torn off in one piece. The bark is now soaked in water until it is soft, and then pounded flat on a smooth, wooden log, when the rough outer coat comes off, leaving the soft inner coat, which is almost as fine as woven cloth. The color of the bark is now reddish brown. It may be used as it is, or dyed, or decorated with patterns.

Such cloth is worn by both men and women: sometimes

in gowns which fall to the feet, sometimes in short petticoats, and again as skirts and cloaks. The ladies of Uganda, it is said, like the rustle of their bark-cloth dresses, when they are new and stiff, just as our ladies like that of silk skirts.

Farther south along Lake Victoria in the German possessions the land is so fertile that it may some day be one of the granaries of Africa. The natives here are blacks with negro features, and are the more ugly from their custom of knocking out their front teeth. They have a sultan and also independent chiefs. They dwell in villages of round, thatched huts about five feet high with conical roofs. Each roof extends out so as to make a kind of porch about the house, and there are often partitions inside the hut dividing the sleeping and other rooms. Sheep, goats, and chickens live with the family, and the rooms are not very clean.

In some villages the houses are built in a circle at a fixed distance apart, thorn hedges connecting them in such a way that they form an inclosure in which the cattle and sheep are kept at night. The people sleep with wooden pillows on beds of skins or upon the floor. They wear very little clothing, some having only an apron of leather. They have necklaces of crocodile teeth and cowrie shells, and anklets of brass, iron, or copper; some wear wide bands of ivory hollowed out of elephants' tusks. They use shields and spears for fighting, and also bows and poisoned arrows.

Everywhere we go we see the women working in the fields, and more seldom the men. In many of the African tribes the women do all the work, but in some, about the

lower shores of Lake Victoria, the husband goes out into the field while the wife cleans up the house and cooks breakfast. She carries the breakfast with her to the fields, and after the meal has been eaten joins her husband in the work. A man may have as many wives as he can afford to buy. Six cows is considered a fair price for a girl, and, if the marriage is not satisfactory, the wife can go back home, provided her family return the cattle.

21. IN UGANDA

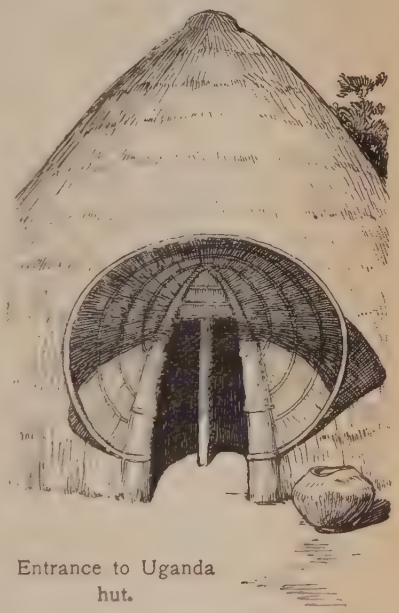
TRAVELING northward across Lake Victoria, we enter the state of Uganda, and move about from place to place exploring the country.

Uganda is one of the most valuable and interesting of the African provinces. It is a beautiful land about twice as large as the State of Ohio, with grassy plains, lofty mountains, and dark valleys. The best soil is of a rich red. There are hills of fine pasture, dense woods filled with big game, swamps choked with papyrus reeds, in which rhinoceroses and hippopotamuses are found, and other regions where the grass is ten feet in height. There are also vast stretches of meadow land, spotted with groves of beautiful trees, and dotted here and there with villages, about which are small gardens and farms.

The people of Uganda have a higher civilization than any of the other tribes of central Africa, with a government of their own which they manage under the British. There is a king and a native assembly which rules the people through the chiefs.

The people of Uganda are intelligent. They have a system of numerals of their own based upon decimals. They are anxious to learn, and they welcome the Christian missionaries who are working among them.

They are polite, neat, clean, and modest. They all wear clothing, either of bark cloth or cotton; although some of them take their clothes off when they sit down to their meals in the huts. This we suppose is to keep the clothes clean. They are hospitable, and we have no trouble in learning just how they live.



Entrance to Uganda hut.

The huts of Uganda are perhaps the largest and best in all Africa. They are much like haystacks in shape, rising from the ground in a cone. The doorway is cut in the side of the hut, with a bonnetlike projection over it. The houses are made of a framework of wood, covered with reeds, which is then faced with grass mats and laced with sticks or bark. The walls are thick, and the houses are comfortable.

Entering one of these homes, we find that the roof is supported by many poles, so arranged that they divide the interior into two apartments, — front and rear. In the back,

around the wall, are bunks in which the family sleep at night. About the chief huts are sometimes smaller ones, where the women work, making wine, drying tobacco, or grinding flour. Some dwellings have separate huts for kitchens. Others are quite small, the cooking being done over a fire hole in the center.

". . . the roof is supported by many poles, . . ."

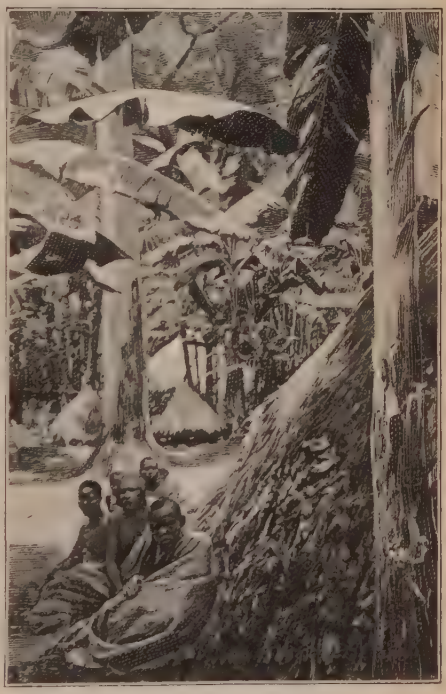
The floor of such a house is the ground. It is covered with soft grass, a new carpet of this kind being spread upon the old when it becomes dirty or wet. Some families let the chickens, goats, and sheep sleep indoors at night, and we find that the dwellings are none too clean after all.

These people have but little furniture. The ordinary family is satisfied with a few stools, a half-dozen earthenware pots, some wooden bowls, and basins made of wicker or grass. The bark-cloth clothing and other treasures are tied to the roof, or hung upon the poles which uphold it. There may be spears, shields, and hoes standing against the walls of the hut.

The villages are usually situated in groves surrounded by pasture lands. The people have fine cattle, with humps on their backs, and also fat-tailed sheep and goats. They raise chickens, and have dogs which seldom bark. Nearly every family has a garden of sweet potatoes and other

vegetables, and some have patches of grain, sugar cane, and coffee.

We see banana groves everywhere, not only here but in the other States of central Africa; and are told that the banana is most valuable to the natives. It gives them food and drink, and they use it for string, soap, timber, and clothing. The green fruit is cooked as a vegetable, and when ripe it serves as a dessert. The banana is, in fact, the chief food of these people, taking almost the same place that wheat and corn have with us. The green bananas are tied up in banana leaves and steamed until they are well done; the flesh is then floury, sweet, and palatable, and when dried it may be made into flour.



"We see banana groves everywhere, . . ."

Banana leaves are used to thatch houses; they serve as tablecloths and napkins; they take the place of paper; they are the covers for milk and water baskets. The stems of the banana are sometimes made into fences, and their

pith is scraped out and used as a sponge. The fibers form excellent cord, and may be woven into sun hats and shields.

There is an intoxicating drink made from the banana which might be called banana brandy; and another, less strong, which might pass as banana beer; while a third banana drink is not intoxicating at all. If the native has bananas in plenty, he thrives; if not, he is likely to starve.

We have but little trouble making our way through Uganda. There are many roads, and the people are ready to help us about. We find them kind and hospitable and far superior to those whom we met on our tour of the lakes. The men are skillful blacksmiths, and the women weave beautiful mats and basket work, using the leaves of the wild date palm.

We are delighted with the children, and now and then stop to have games with them. The boys are fond of wrestling; they play ball and throw sticks in a remarkable way. They learn to hurl spears and to use shields to protect themselves, and have many sham battles. Among their duties is watching the cattle and sheep; but their happiest days are when their fathers or brothers take them out with them to trap the game for which the country is noted.

During our stay with the British officers we talk much about the future of central Africa. They point out the richness of the soil and its value for grazing, telling us that Uganda will some day be one of the chief cattle-raising countries of the world. They describe how the railroad now planned from Cairo to the Cape of Good Hope will eventually be extended northward through this

On the Uganda railway.

region, where it will connect with the road from Khartum now built along the Nile. This will give a railroad from one end of Africa to the other, and will make many changes in this far-away land.

22. ELEPHANTS AND IVORY

ELEPHANTS are found in Asia and in Africa, but the largest and fiercest come from Africa and especially from the region where we are now traveling. The African elephant differs from its Asiatic brother in that it has larger tusks, a more sloping forehead, and wide, flapping ears.

The elephants of Asia are sometimes caught and tamed. They are used as beasts of burden and are made to work

in the lumber yards. In parts of India, Burmah, and Siam people travel from place to place upon them, and the rajahs or princes ride them when they go about in state. The African elephant seldom becomes tame. It lives in the forests or on the plains of the wilder regions of the continent. It is hunted for its ivory tusks, and is gradually being exterminated in those regions where white men are settling.

In some parts of the African States, elephants are almost as great a curiosity as buffaloes in our country; but in other places, such as the Kongo valley, the Sudan, and the highlands of central Africa, where we now are, they roam about in vast numbers, and we may often stumble upon herds as we go through the forests.

Elephants travel in company, parents and babies, old and young, moving along together. Sometimes several hundred may be seen marching from one place to another, the mother and children going in front while the father elephants come behind, protecting the rear. The fathers are larger and stronger than the mothers, and they will fight for their families. The mothers will also fight. Elephants are fond of their children, and it would be dangerous indeed for us to try to steal a baby elephant. Besides, it would take more strength than we have to carry one away; for the ordinary elephant baby weighs as much as a big fat man and it grows fast.

The elephant is the largest beast known. There are many in Africa which weigh three or four tons, and have such big legs that one might take them for trees if he were looking along the ground through the forest.

Notwithstanding their size, these animals travel rap-

idly. Their weight enables them to crush through the jungles. They step lightly with their huge feet, and when traveling will go for days at an average speed of six miles an hour. They can swim rivers and climb up and down hills, so that it is difficult for men to keep up with them.

The head of the elephant is the most remarkable part of its body. It is of enormous size, with little eyes, not much larger around than our own, a long nose or trunk, and tusks larger than those of any other animal.

The elephant's trunk is so important to him that he could not possibly get along without it. It serves as both hand and nose. If it should be cut off he would starve, for his neck and tusks would not allow him to get his mouth to the ground, and he could not drink. The trunk is as flexible as india rubber. It has hundreds of different muscles running through it in almost every direction, and it can be stretched or shortened at will. At the end there is a kind of fingerlike lip with which the animal can pick up a blade of grass or the smallest thing from the ground. The lip is very strong, as is the whole trunk. The beast pulls off reeds, branches, and herbage with his trunk. He rears up on his hind legs and tears down young trees, or bends them over into his mouth so that he may eat the tender shoots and leaves.

In drinking, the elephant first sucks the water into his trunk, and then squirts it into his mouth. He often sprays his body in this way, giving himself a shower bath as it were. He uses his trunk to feel with, rubbing it over his baby to pet it. When angry he throws the trunk high into the air and blows a trumpet blast through

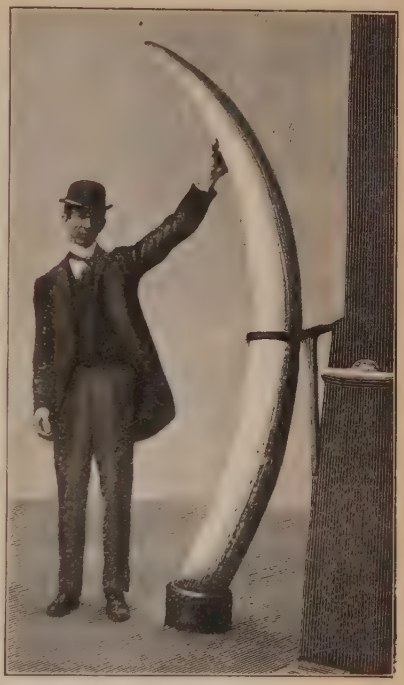
it, and when attacked he sometimes pounds his enemy to death with it.

There are two other parts of the elephant's head which are even more interesting. These are the tusks, or great hornlike teeth, which grow out of each side of its mouth. Every elephant has two tusks; and in addition six great teeth within the mouth on each side of the jaw, above and below. The tusks are fitted into bony sockets, their roots going almost up to the eyes of the elephants. They begin to come when the elephants are quite young, and continue to grow as long as they live. Some elephants live to be a hundred years old, and the older ones have tusks more than eight feet long, and so heavy that it takes four men to carry one across the country.

Carrying ivory to the coast.

The tusks are a valuable article of commerce, and are among the things which Africa exports to all parts of the world. Ivory is worth so much that ships are sent to Africa for it. Men hunt the elephants and

carry the tusks for hundreds of miles through the forests to get money for them. Much of this work is done by slaves, the Arabs and other strong races forcing them to carry the ivory. Sometimes slaves are exchanged for ivory, and in times past the slaves were made to carry the tusks to the seashore, where both slaves and ivory were sold.



"A large one may weigh two hundred pounds . . ."

Elephants' tusks are of different sizes, according to the age of the animal. A large one may weigh two hundred pounds and be worth hundreds of dollars. Such is the tusk shown in the picture. A small tusk may not be so long as one's arm. So much ivory is needed that more than fifty thousand elephants are annually killed and their tusks shipped to Europe, most of them coming from the valley of the Kongo.

The ivory of commerce comes not only from elephants thus killed, but also from those which have died generations ago. Many elephants die natural deaths in the for-

est wilds; some are killed by lions and other wild beasts. The skeletons are found by ivory hunters, and their tusks taken out and carried to the market. The native kings often have ivory stored away in their villages, and it is said that some have fences of tusks about their huts. They know that ivory is valuable, and save it as we save money. All such ivory is old, and not so valuable as the fresh ivory. It is known in the markets as dead ivory, while that which comes from the freshly killed beasts is live ivory.

We shall have many invitations during our travels to go elephant hunting, but the sport is so dangerous that we shall hardly accept. The natives say it is more dangerous to hunt elephants than lions. The elephant is revengeful, and, if attacked, will run after his enemies and try to kill them. If he can get the hunters within range of his trunk, he will knock them down with it and crush them to death with his tusks, or stamp upon them with his huge feet.

The elephant has such a thick skin that heavy guns with large bullets are needed, and even then there are only a few places where a shot will prove fatal. If one can hit him just over the eye or back of the ears, or halfway between the ear and the eye, there is a fair chance of killing him; there is also a place near the tail where a bullet may pass along the spine into the lungs, causing the animal to bleed to death. In such hunting the men must be wary, for the moment the elephant sees them he throws his trunk into the air, screams, hisses, snorts, and rushes at them. His brother elephants join him, and often the hunters are killed.

Notwithstanding this, the natives manage to destroy many elephants. They sneak up behind one of the great beasts, and with a stroke of the sword so cut the tendons and arteries of his hind foot that he is lamed and bleeds to death. They arrange a snare, so that when an elephant stumbles upon it a heavy weight with a barbed spear fastened to it falls down upon his back. The spear is sharp, and if its blade enters the elephant's lungs, it causes death.

Elephant spear.

After an elephant is killed, the tusks are chopped out with axes and the flesh is cut from the bones for food. The natives are fond of the meat, and they eat every part of the animal except the skin and bones. They make elephant soup, steaks, and roasts, and preserve some of the flesh by smoking it as we smoke beef.

The tidbits of the elephant are the feet and trunk. These are roasted in a peculiar way. A hole is dug in the ground and a fire built in it. When the earth has become thoroughly hot, all but the glowing coals are taken away, and the foot or trunk is laid upon them. Sticks are then placed over the top of the hole, closing it tight. After several hours this curious oven is opened and the roast taken out, the skin is removed, and the meat is ready for eating. The foot thus prepared is so tender that it can be scraped out with a spoon, and many think it delicious.

23. THE STRANGE ANIMALS OF AFRICA

AFRICA is the continent of big game. It has the largest beasts and the most dangerous. It has many strange animals not found in other parts of the world. There are vast territories which are still wild, and we shall be meeting odd creatures everywhere during our travels.

We shall see more hippopotamuses and rhinoceroses as we go on southward or in our travels through the Kongo valley. The hippopotamus is found in many parts of Africa. It lives in the swamps or along the lakes and rivers, eating the grass and plants which grow in and near the water. These beasts always travel in herds; they are fond of one another, and now and then a mother hippopotamus may be seen swimming a stream with her baby standing upon her back.

The hippopotamus is not so large as the elephant, but it is an enormous beast nevertheless. It has a big head and a short, thick neck, with small eyes, and ears so high up in the head that they remain outside the water when the rest of the animal is almost hidden beneath it. It has twelve tusks in the form of teeth, strong enough to bite through a small tree, and so placed that they cut grass or corn almost as if with a scythe. It has twenty-four other teeth, which it uses to grind its food. The tusks are valuable as ivory, and the animal is killed for them and also for its thick skin and flesh.

The natives like hippopotamus meat, and they consider the fat which lies under the skin of the back a great

delicacy. They are fond of the tongue, and make a jelly of the feet. They also render out the fat for medicine.

Hippopotamuses are wary, and it is difficult to kill them. Their skins are so thick that large guns must be used. The best place for a shot is just below the eye or back of the head between the ears.

Hippopotamus.

The hippopotamus swims with the greater part of its body under water, and it often lies in the water, showing only its ears and nose. When alarmed, it dives, and may not come up for a long time. The natives hunt it with canoes, using harpoons to which large, wooden floats are attached. If the animal is killed, the floats show where it lies. Such hunting is dangerous, for the beasts will fight if attacked. They can not see far, however, and for that reason are easier to kill than elephants.

The rhinoceros is also dangerous. It is about as large as the hippopotamus and of somewhat the same shape. It has one or two great horns growing out of its nose, with which it can impale a man or even a horse. The

Rhinoceros.

word "rhinoceros" means "nose-horned," and it is about the only animal which has a horn growing from the top of its nose. These horns are of different lengths, according to the species, some being short and others three or four feet in length. The animal uses the horn not only for defense, but also to dig up the bushes, small trees, and roots upon which it feeds. It has a lip somewhat like that of the elephant's trunk, with which it can pick up small objects.

The skin upon the back and sides of the rhinoceros is twice as thick as this book, although it is less thick over the abdomen. It makes excellent whips and is so used by the natives. They cut the skin into long, narrow strips, one

end of which they tie to the branch of a tree. A heavy stone is fastened to the lower end of each strip to keep it stretched. After it has dried hard it is scraped round and smoothed off with sand or stone.

The rhinoceros, like the hippopotamus and the elephant, has an enormous head, a short and thick neck, and huge feet. The foot of the elephant is the largest. The rhinoceros has three toes on each foot, the hippopotamus four, and the elephant five. All three animals are difficult to kill. All are exceedingly heavy, as we should surely know if one trod upon us.

Although the lion is called the king of the desert, we saw none during our travels in the Sahara. But few lions

Lion.

are found in the desert except near the oases or along the edges. The true home of this beast is on the high pasture lands and other fertile parts of the country. Lions live upon deer, antelope, and other game, and such game is found only where there is good pasture or woods. There

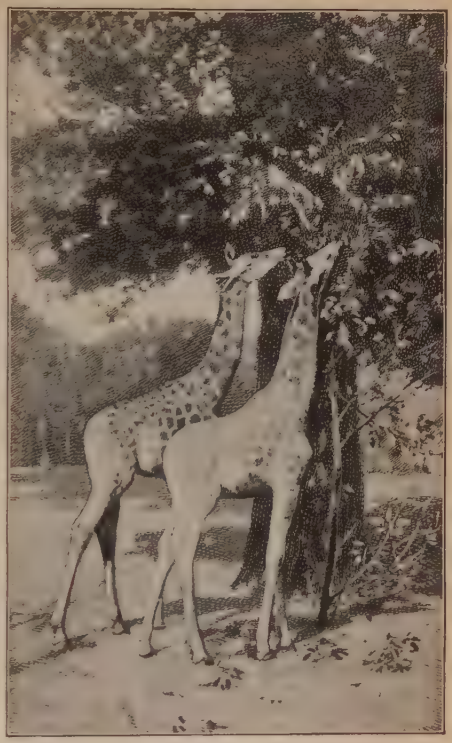
are many lions in Abyssinia, in Uganda, and in different parts of central and southern Africa. They are hunted by both whites and natives, although every one is afraid of them. The natives sometimes catch lions in traps, which they bait with live goats or sheep; they also make pits with sharp stakes at the bottom upon which the lion falls and is killed.

In addition to these dangerous animals, Africa has many less harmful, and some not dangerous at all. It might be

"The wildebeest has the tail and mane of a horse, . . ."

called the home of the antelope and the gazelle. It has many varieties of deer, and some which seem to be half deer and half horse. The wildebeest has the tail and mane of a horse, and horns of an ox, while upon its chin is a shaggy tuft of beard like a goat. The eland and the koodoo are antelopes found in southern Africa. The steinbok ante-

lope, which enjoys a wide range, has a short tail, and the pah antelope is not much larger than a rabbit. Gazelles are small, deerlike animals with horns; they are very beautiful and graceful.



Giraffes.

We have all heard of the giraffe, and find it interesting to study it in its home. The largest giraffe is so tall that it could stand upon the ground and look down into the chimneys of an ordinary cottage. It has a neck so long that it can easily pick the leaves of trees, which form its principal food; and its tongue is so long and strong that it can wrap it around the leaves to pull them off. Giraffes are usually of a light fawn color, with dark spots somewhat like a leopard. They are often called cameleopards, because they look like a combination of camel and leopard.

The giraffe runs like a camel, and it can go so fast that it is not easily captured. It has hoofs, and if attacked in

the woods it will jump upon its enemy with its fore feet. It is found in different parts of Africa, and especially along the desert. The Arabs hunt it for its skin, out of which they make shields. They also use its sinews for thread and string.

In this region where we now are there are many zebras, and we often think it would be fine if we could tame these wild striped ponies and take them back to our homes. We saw great herds of them in the wilder parts of Abyssinia, and they are also to be found in the mountains of British East Africa. They go galloping over the hills, their striped coats shining in the light of the tropical sun. Now and then we hear one call out to his fellows. His cry is not like the neigh of the horse, nor the bray of the donkey, but a shrill yap! yap! yap! We learn that the natives kill zebras for their meat and tan their hides for mats and leather.

In addition to the animals which we have seen, Africa has many monkeys, gorillas, leopards, hyenas, and other wild beasts. It has buffaloes and wild hogs, and also odd reptiles, birds, and strange insects.

24. IN THE SUDAN

OUR next travels are to be in the Sudan, that vast strip of country between the Sahara and the Gulf of Guinea, extending from the Atlantic Ocean clear across the continent to the highlands of Abyssinia.

The Sudan is geographically divided into three parts: the Egyptian Sudan, containing the basin of the upper Nile,

Northwestern Africa.

which we have already seen; the central Sudan, including Lake Tchad; and the western Sudan, comprising the basins of the Senegal (sĕn-ē-gal′), Niger (nī′jēr), and other rivers which flow into the Atlantic Ocean. The country is politically divided amongst the French, German, and British, who have taken possession of it on the ground of exploration, or through their treaties with the natives. It is also otherwise divided according to its native tribes.

This territory is so large that we can explore only the principal parts of it. The distance across it from east to

west is greater than from New York to San Francisco, and its width from north to south is greater than the distance from Chicago to New Orleans. The different parts of the country vary in character. In the north, beginning with the semi-arid regions which border the Sahara, it has high, fertile plains dotted with magnificent trees. Here the climate is good, and the people are somewhat civilized.

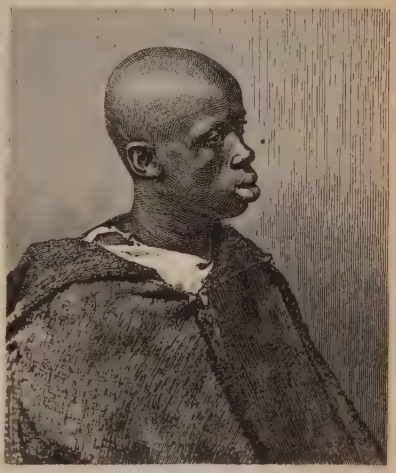
Farther south there is a dense belt of forest, and along the coast the land is swampy. The lower part of it contains hundreds of streams, and water ways form the chief means of moving from one place to another. This region is unhealthful for foreigners, fevers are common, and so many Europeans and Americans have died here that the land has been called "The White Man's Grave." Nevertheless it is the home of many thousand natives. Its people are almost savage, some of the tribes going naked and some having human sacrifices.

Why is this country called the Sudan? Words always mean something, and there must be a reason for the name. The word "Sudan" means "black," and the Sudan is the land of the blacks. It is the true home of the negro, and parts of it are inhabited by many millions belonging to that race.

We have already seen that there are other races than the negro in Africa. The continent has four principal races and many subordinate ones, made by the principal ones mixing together. Most of the northern natives are the descendants of the white type of mankind, while those of the southern Sudan and southern Africa are of two races of the black type. The northern Africans of various tribes are the descendants of the Semitic and Hamitic races.

They are much like us, having similar features and sometimes, as we saw in the Atlas Mountains, skins almost as white as our own.

The black races are the negroes, who are found in their purest state in the southern Sudan along the Gulf of Guinea (gĭn′ē), and also the Bushmen and Hottentots, who live in the southern part of the continent. These black races have somewhat similar features; they have woolly hair, thick lips, and flat noses; but the Hottentots and Bushmen have lighter skins and more prominent cheekbones than the pure negroes.



Negro.

In addition to these races there are many others formed by the different races mixing together. Africa has thousands of independent tribes which have always been warring upon one another. Captives taken in battle have become slaves, and slaves have been carried from country to country and sold. They have sometimes intermarried with their captors, so that in places it is almost impossible to tell where one race ends and another begins.

The people are sometimes classed according to the language they speak. There are many different languages used in the different parts of Africa. In the Kongo basin

and in the southern half of the continent there are tribes which speak the Bantu language, and for this reason they are referred to by the common name of Bantus. We shall hear this name as we go on with our travels.

Our first journey through the Sudan shall be to the high plains, where we may, perhaps, meet some of the old friends with whom we traveled in the Sahara. Caravans are always moving across the sands from the Mediterranean to these plains, carrying goods. There are a number of caravan routes, and great market towns to which the caravans come. The most important of these are Timbuktu, in the French Sudan, Kano (kä-nō′), in northern Nigeria, and Kuka (koō′kä), on Lake Tchad, the two latter towns being in the British Sudan. These places are at wide distances apart, but they are all on the highlands not far from the Sahara, and their people have been trading for many centuries with the more civilized people of the north.

The chief trade routes of the northern Sudan run east and west, on account of the dense forests which lie farther south. They are little more than paths through the country, and we shall not attempt to describe our slow marches from place to place.

25. ABOUT KUKA AND LAKE TCHAD

WE have sailed down the Nile from Uganda for some distance, and thence crossed the vast expanse of country between that river and Lake Tchad to Kuka, the capital of Bornu (bôr-noo′), on the western side of the lake. We have met many caravans on our way, and as we near

Kuka we see long strings of camels going in and coming out of its gates. The tail of each camel is tied by a string to the nose of the one behind it, so that if one wishes to pass he has to wait until the whole caravan has gone by. The caravans coming in have just arrived from the desert, and those going out are on their way north through the different oases to the Mediterranean.

Now we have passed through the gate and are in Kuka. What an odd city! We can see a great part of the town as we sit on our camels. It is composed of thousands of thatched huts, with here and there a one or two story building. The city has two sections, each surrounded by a white clay wall. In one live the king, his nobles, and some of the army; and in the other the Arab merchants and the common people. Between the two lies the market, thronged with donkeys and camels, horses and mules, and the thousands of odd characters which make up the city. There are native soldiers moving about. Some are armed with lances, spears, and swords, and others with guns. We learn that the king of Bornu is powerful, and that he has many men in his army.

Bornu has for ages been noted as one of the chief kingdoms of Africa, and it has a written history which can be traced back a thousand years. It was once the center of a great empire, and its people grew rich through their wars and by trading. Their wealth spoiled them, and they neglected to keep up their army, and were afterward destroyed. Since then other empires have risen and fallen, and even to-day the country is great. It has a territory a little larger than the State of Illinois, and its population is supposed to number several millions.

The people are mostly Mohammedans. They are great traders, dealing largely in slaves, whom they buy or capture from the neighboring tribes and send across the Sahara. They hunt elephants and ostriches, exchanging the feathers and ivory for European goods, which they in turn send farther south to sell.

Many of the natives are farmers. The country has a fertile soil. We have already passed by little plantations of cotton, wheat, millet, and other grains on our way here; there are also groves of bananas and delicious fruits. They have excellent horses, and we have no trouble in hiring saddle animals for a trip about the country.

We take rides along the shores of Lake Tchad, keeping well out of the way of the hippopotamuses, which are to be seen here and there with their noses just above the surface of the water, or wading about in the shallows near the shore. Now and then we take a ride in one of the native boats. The lake is by no means so beautiful nor so large as Lake Victoria, although it is one of the largest lakes of the world. It varies in size with the seasons. During the floods it becomes an enormous lagoon, almost as big as Lake Huron; while in dry times it is as small as Lake Erie and looks more like a swamp than a lake.

Leaving Kuka, we travel eastward through Bornu to Kano, making our way with a party of traders from one place to another. We have to go slowly, marching along in single file, for the roads are mere paths leading from village to village. It takes quite a little army to carry our baggage. We have not only food, but also bales of cloths and bushels of cowrie shells with which to pay our expenses. The traders have their money in slaves,

making each slave carry a load of goods on his head and selling both slave and goods at the villages on the way. A good slave is worth one hundred and fifty thousand cowries, and slaves have long been a common currency in this part of Africa.

"It takes quite a little army to carry our baggage."

We do not believe in slave trading, and therefore carry cloths and cowrie shells instead. Silver and gold coins are not known; and the only money used for small change is these little shells, which are brought by the ship load to Africa from different parts of the Indian Ocean. Each shell is about as big as a lima bean, and its value in some places is so small that it takes forty to be worth one of our cents, and five dollars' worth would fill a bushel basket. Such an amount of shells would be a load for two men, and if all our money were carried that way, we

should not have enough to pay the wages of the porters by the time we reached Kano. Therefore we use cloth, one bale of which is worth many thousand shells. We cut off a yard or so at each village, and trade it for shells with which to buy what we want.

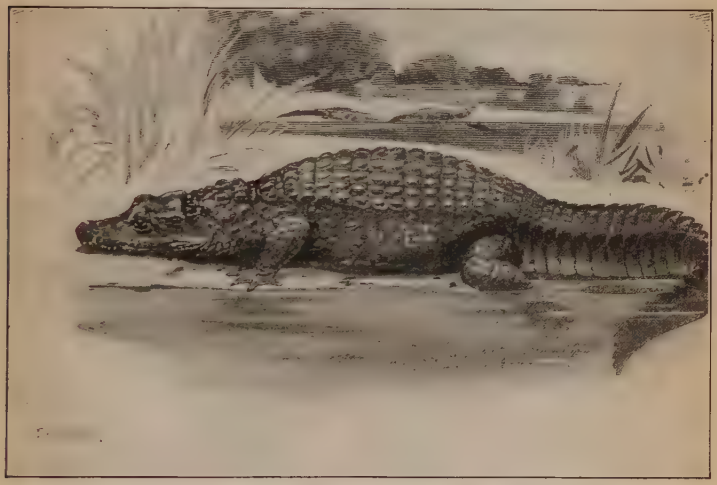
We also do much trading by barter, exchanging what we have for the goods of the natives. This way of doing business seems odd. If we ask a man who has a sheep for sale what it is worth, he may reply three yards of black stuff, or six yards of white stuff, or perhaps fifty glass beads, or so many bars of salt, according to what we have to offer. Most things are exchanged in this way; and the people are so like children that a mechanical toy or a doll which cries would easily buy several parrots or monkeys. We regret we have not toys to take the place of the mass of cowrie shells we are carrying.

We move along carefully, stopping at the villages every night, and going nowhere alone after dark for fear of lions, leopards, and other wild beasts. We keep together on the march, lest we be captured by the slave traders, and carried off to the wilder parts of the country, and sold.

Every now and then we see strange birds of beautiful plumage, and butterflies and moths more gorgeous than any found in our land. There are frogs in the swamps and tortoises and crocodiles in the rivers. We are told to look out for snakes, and especially for the little puff adder, whose bite is death.

The insects of Africa are quite as dangerous as the wild beasts. We examine our toes every night to know whether we have been bitten by the jigger, a little insect which burrows under one's toe nails and there lays its

eggs. This is done so gently that one does not know it until his toe begins to itch, and then, upon looking, a black spot is seen just under the nail. This contains the eggs in a little sack which may be taken out with a needle. If it is left and the eggs hatch, the insects create a festering sore which often causes the loss of a toe.



Crocodile.

Among the most interesting African insects are the ants, which are to be found in almost all parts of the continent. As we travel about we often go by mounds thirty or forty feet thick and from ten to fifteen feet high. Each mound is an ant-hill, the home of thousands of ants. It is a network of tunnels, galleries, and chambers, arranged in stories, some of which are far below the level of the ground. It might be called an ant apartment house.

"It might be called an ant apartment house."

The ants have a queen who is waited upon by the workers away down in the basement of such a house. The queen lays all the eggs of the colony, and her subjects take them as they are laid and carry them off to the nurseries to hatch them. In some colonies there are soldier ants which guard the queen; and the working ants labor under the soldiers.

Among the most destructive of these insects are the white ants. We soon learn about them; for they have got into our baggage and eaten our lead pencils, the corks from our bottles, and all other things made of wood. White ants will eat almost anything except iron or very hard wood. They eat tables and chairs. A man with a wooden leg would not dare to sleep in certain parts of Africa for fear of finding his leg a heap of sawdust in the morning. These ants burrow into the wood of houses. They work in the dark, and eat inside the posts and pillars until nothing is left of them but mere shells, which finally give way and the whole house falls.

In going through the woods we are surprised to see but few dead trees upon the ground and very few branches.

We often pick up a stick to use as a cane and find that it breaks to pieces in our hands. The ants have eaten out the inside of the stick and left only the shell. They have eaten the dead trees and the shells have crumbled to dust.

Such ants are bad enough, but there are others much worse. There are some whose bites sting like red-hot

Ant village.

needles and others so ferocious that we can pull their bodies apart but their jaws still stick in our flesh. We are warned against the terrible driver or soldier ant, and give him a wide berth. This ant does not weigh as much as the smallest pea, but lions, leopards, and even elephants rush to get out of its way. The driver ants move in vast numbers, in regular order, from place to place, looking like

a strip of black ribbon as they cross one's path. If they meet anything living, they throw themselves upon it and bite it to death. They tear the flesh bit by bit from the bones, and in a short time reduce it to a skeleton. When they attack a hut, not only the people, but even the rats, mice, and insects run out, for nothing living is willing to fight the terrible driver. If they get upon us, the best thing to do will be to rush for the nearest stream and dive in. The ants do not like water, and they will let go when it touches them.

26. IN THE LAND OF THE HAUSAS

WE are now traveling in northern Nigeria, through the lands of the Hausas (hou'sàs). Nigeria is a vast country belonging to Great Britain, comprising a large part of the basin of the river Niger. It is several hundred miles wide, and extends from the Gulf of Guinea to the Sahara. It has all together about twenty-five million inhabitants, of whom more than fifteen millions speak the Hausa language.

"But who are the Hausas?" we ask.

They are black people who for ages have been among the most civilized and most powerful of the Africans. They have a tradition that their ancestors came from Arabia to the Sudan many hundred years ago, and settled some distance north of where the city of Kano is now. They founded Kano more than five hundred years before Columbus started on his voyage of discovery, and built up here a great empire, which was half as large as the conti-

nent of Europe. Later on their empire was broken up into small kingdoms, and to-day the same country is composed of many kingdoms, some of the rulers paying tribute to the kings of Sokoto or Gando.

We stop at Hausa villages on our way to Kano. The people are as black as any we have seen; but their lips are not so thick as those of the negroes. They are a mixture of the Hamitic branch of the white race and the negro, and are far more intelligent and of a higher degree of civilization than the pure negroes of the coast.

Three little Hausas.

The Hausas dress becomingly. Both men and women wear clothes of native cotton, dyed blue or scarlet, and sometimes embroidered in beautiful patterns. The ordinary costume is a loose gown which has wide flaps covering the arms and a pair of baggy trousers below it. There is a great pocket at the front of the gown, in which all sorts of things are carried; and as many of the Hausas are somewhat light-fingered, we have to watch them, while they call upon us, that our valuables may not find their way into one of these pockets.

The Hausas wear enormous hats; they have boots and shoes, but they seldom use them except when in town.

The children go scantily clad, and babies are often naked. The little ones are carried by their mothers tied to their backs, and we frequently see women binding wheat or hoeing the garden with babies slung to their backs.

The larger Hausa villages have walls about them for defense. The dwellings are odd, most of them being built almost entirely of mud. We know why when we remember that the white ant will eat any timber which is put into a building. Very few of the houses are of more than one story. There is but little furniture. A bedstead made of reeds about a foot and a half high serves as a seat during the day and as a sleeping place at night. In some cases the bedstead is of mud, with a hollow place under it in which a fire can be lighted. Such bedsteads are not strong, and, although we like the warmth, we should fear that the bed might give way and we drop through into the fire.

We find the Hausas very polite. They make us at home in their villages and often send a guide with us to the next town. Such a man usually carries a drum, to give the people the news of our coming. The drum serves as the telegraph instrument of this part of the world. When villages are close together, messages can be sent from one town to another by tapping on the drum in a certain way; and our drummers are thus able to let the people know who we are and how to receive us long before we get there ourselves.

As we near Kano we meet many Hausa soldiers and, now and then, a long-gowned priest in a turban. These people are mostly Mohammedans, and we see them praying with their faces toward the east, and learn that they

even make pilgrimages to Mecca. Among the most bigoted are those of the race known as Fulahs, who are taller and have lighter skins than the Hausas themselves. They scowl at us as we pass by, for they do not like Christians.

These people believe in charms; and some of the Fulahs are thought to be so holy that they can write charms which will prevent disease, make one rich, or cause his sweetheart to love him. The charm is first written in ink on a flat piece of wood. It is then scoured off, and the wash water is drunk by the person who wants to benefit by the charm. They are also skilled in making poisons; and we are warned we must be careful what we eat as we go through the country.

The Hausas have excellent food. They are good farmers. We pass fields of guinea corn, maize, wheat, and rice. They raise quantities of millet and also peas, beans, sweet potatoes, and onions. They have bananas, oranges, mangoes, and other fruits. Some of them have large herds and flocks, and so many bees that their country is really a land of milk and honey. They fry sweet potatoes in palm oil and roast yams over the fire. They make cakes of flour mixed with red pepper, and a porridge of guinea corn so seasoned with pepper that it almost burns one's mouth. We have plenty of chickens and ducks and occasionally some beef, mutton, or goat's flesh. The Hausas eat the locusts which now and then come in swarms over the country, darkening the face of the sky. They catch locusts with nets and roast them.

We spend some time in Kano. It is, perhaps, the largest city in central Africa; it has about a hundred thousand people and is surrounded by walls fifteen miles in circum-

ference. The land for miles about is well cultivated, and there are many little gardens inside the walls. The city has thirteen gates and also a water gate to let out the floods. Much of Kano is low and swampy, and a sheet of water near the center divides the city into two parts. On one side of the water the richer Hausas and most of the Arabs live, and on the other side are the poorer people.

Citizens of Kano.

Kano is made up of a variety of low buildings; most of the houses are of mud, and many are surrounded by walls. One wall often incloses several houses.

Some parts of the town are given up to manufactures, the people doing the work at their homes. Here they are weaving the cloth in long narrow strips beautifully dyed, so famous throughout central Africa; here they are sewing saddles and leather goods; and there making great hats of straw; while in a house farther on a blacksmith is pounding out a spear or a sword.

The most interesting place in the city is the market, which lies close to the lake. It is said to be the largest

market in Africa, and it is estimated that there are often thirty thousand people buying and selling here at one time. There has been a market on this spot for many centuries, and a thousand years ago the people were making goods in this town.

The crowd in the market is from all the regions about. There are half-naked, black-skinned men with negro features, there are fair-skinned warriors from the desert with veils over their faces, and long-gowned Arabs in turbans. The market stalls are rude sheds of leaves and mud, or mere mats or cloths hung up to shield the sellers and buyers from the rays of the sun. At other places the dealers have spread their stuff on the ground and are selling out in the open.

Market at Kano.

Every kind of goods has its own quarter. Here they are peddling fuel. The wood is tied up in bundles, and it has been brought in from the country on the heads of slaves. Over there nothing but cloth is sold. The goods are of bright colors, and the most beautiful of them were made by the Hausas. Other cloths, from Europe, have been brought across the Sahara on camels.

We stroll through the leather market, pricing the strange-looking shoes and slippers and the boots of red and yellow leather turned up at the toes. There are leather pillows and soft leather cases for books. Most of the Hausa books are unbound, and these cases are somewhat like satchels. We go to the pottery stores, where cooking utensils, made of clay, are sold; and then to the iron mongers to buy a spear, a sword, and other trinkets. We stop at the sweetmeat stands to taste a mixture of honey and nuts fried in oil, and then go on to a stall where the merchants are selling sugar and salt to the children. We find that they charge quite as much for the salt as the sugar, and that the children seem quite as glad to eat one as the other.

The grain and vegetable markets are interesting. We see millet, rice, barley, and different kinds of corn; there are also pumpkins, peanuts, onions, yams, and sweet potatoes, fresh and sour milk, butter and cheese.

We hear a great squawking, baaing, and braying, and pass on to the section devoted to the fowls, goats, sheep, cattle, horses, and donkeys. We can buy a good riding pony for about five hundred thousand cowries; and a fine saddle is worth more than its weight in these shells.

Among other strange things in the market are kola nuts, used as a stimulant and for medicine; and antimony,

with which the women dye their eyelids to make them more beautiful. We spend some time going from section to section watching market chiefs collect the taxes of the merchants according to the places they have and the amount of their sales. Everything is carefully ordered, and we feel quite as safe as in our markets at home.

27. THE UPPER NIGER—TIMBUKTU AND JENNE

WE are traveling this morning up the great river Niger toward Timbuktu, the chief trading center of the French Sudan. We left Kano some weeks ago and made our way to Sokoto, Wurno, and Gando (gän′dō), smaller cities farther westward governed by Fulahs, having people not unlike the Hausas. From there we came to the Niger, one of the chief rivers of the world, and are now afloat upon it.

The Niger is as long as the Mississippi proper. It is surpassed only by the Kongo and the Nile among the rivers of Africa, and it has a basin almost one third as large as the United States. The river rises on the western side of the Kong plateau, not far from the sea, and flows clear across the Sudan in a northeasterly direction, to the Sahara. It skirts the desert for some distance and then turns to the southeast, and after a long, winding course loses itself in the Gulf of Guinea in southern Nigeria. It has one great tributary, the Benue (bĕn′wē), the mother of waters, which rises near Lake Tchad and, flowing through a region populated by millions, empties into the Niger several hundred miles from its mouth.

The Niger, like the Nile, has its times of high water and low water, and it also carries quantities of fertilizing material. During the floods the water spreads far out over the country, and in those regions where it flows near the desert there are great areas of irrigated farms, such as we saw in the valley of the Nile. The vegetation is similar; we shall see mules, donkeys, and camels feeding in the fields, and palm trees waving their long feathery branches over flat-roofed mud villages.

Farther downstream, where we now are, much of the river is walled with forests. We travel long distances without seeing anything but alligators upon the banks, monkeys in the trees, and, now and then, a black hippopotamus swimming with its pink nose just out of the water.

At one place we meet some English hunters who have killed a hippopotamus. The great beast lies upon its side

"The great beast lies upon its side . . ."

in the marshes, on the banks of the river, with a score of native boatmen standing about. Its mouth is wide open and we can see the great teeth, which will be saved for ivory.

As we go onward the country grows more open. We pass through plains upon which sheep, goats, and cattle are feeding. The sheep have long hair instead of wool, and the cattle have humps on their backs. The flocks are watched by shepherds, and we frequently see black-skinned natives on the bank. The men are often armed, and they brandish their weapons as we go by. Sometimes they are good natured and beckon us to land. There are women washing their clothes on the edges of the stream, and little half-naked children playing on the shore. Now and then a ferry boat goes from one bank to the other with a cargo of animals and people, and we often pass other boats belonging to traders, who are carrying their wares up or down stream.

Parts of our way are through rapids, where we have to be pulled or pushed with poles; in other places the water is low, and great beds of tall grasses impede navigation.

Our journey is slow, but every day brings new pictures and new things in nature and man. We see strange tribes and strange animals, now getting a shot at a monkey and now at one of the wonderful birds which inhabit the forests of Africa. There are kingfishers as blue as the sky, black crows with white breasts, great flocks of guinea fowls and pelicans, which, as our boat nears them, rise in awkward flight from the river where they are fishing.

The trees are as wonderful as the birds. There are some that yield gutta-percha, others palm nuts and palm

oil, and some from which come flour, cheese, and butter. We have seen palm trees with a sap which turns into wine, and have heard of trees which yield chocolate, sugar, and bread fruit, but these trees seem stranger still.

The karita, or butter tree, has a bark and trunk similar to our chestnut tree, and leaves somewhat like those of the pear tree. It grows very large, and has nuts so full of oil that, when boiled in water, the oil rises and can be skimmed off. As it cools it hardens and is molded into blocks which look more like tallow than butter. The natives use this butter in many parts of the Sudan. The oily nuts are each inclosed in a flesh which tastes much like a peach. It is so sweet that the people make candy of it.

The nata, or flour tree, has large pods containing flour of a yellow color somewhat sweet to the taste; and the cheese tree, which the natives call the baga, produces a fruit which tastes like cheese, and a fiber nearly as fine as silk.

Traveling on northward, we reach the edge of the Sahara, and later stop at the port of Timbuktu, north of the Niger, about nine miles away. There are camels and donkeys near the landing. Strange-looking men are loading and unloading goods. Packs are being taken from donkeys and camels and put into boats, to be carried up and down stream; and other boats are unloading their wares for the camels. Negroes are doing the work, and long-gowned men are ordering them about. There are Tueregs with veiled faces, Arabs in turbans, and many other strange characters from the different parts of the Sahara and the Sudan.

"... passing now and then the skeleton of a camel or horse ..."

We ride over the sands to Timbuktu, passing now and then the skeleton of a camel or horse which has fallen and died on the way. The town looks quite imposing in the distance. It grows less so as we approach it, and when we pass through its half-ruined walls we find only a mass of rude one-story and two-story houses, many of which are falling to pieces. The doors of some of the buildings are gone, the flat roofs have broken in, and there are huts of mud and straw in the middle of the town.

Timbuktu was once one of the greatest cities of Africa, but it has declined and now contains only a few thousand people. We shall find a more important place in Jenne (jĕn′nĕ), farther up the Niger.

Jenne and Timbuktu might be called parts of the same

business city, although it takes several weeks to go by boat from one to the other. Many of the rich merchants who do business in Timbuktu have their homes and business places in Jenne, but also keep warehouses and stores at Timbuktu because of its situation on the edge of the Sahara, not far from the Niger. It is this situation that has made Timbuktu an important place. It is the end of five great caravan routes which cross the desert from Morocco, Algeria, and other places north of the Sahara; so that goods from all of these regions and from the oases are landed at Timbuktu, and thence taken on the Niger to different parts of its mighty basin. At the same time slaves, gold dust, ivory, gums, and the other products of the Sudan are brought to Timbuktu to be sent across the desert; the town has also a connection through the Niger and Senegal rivers and the railroad with the port of St. Louis (săn lo͞o-ē′) on the Atlantic coast, so that goods for and from the other continents are shipped out and in by that way.

Rich merchants of Timbuktu.

In the past, when almost the whole trade was by cara-

van, Timbuktu was far more important. At about the time of the discovery of America it was the capital of the Songhay (sôn-gī′) empire, which was so large that it is said it took travelers six months to cross it. This empire lasted about one hundred years and was finally overthrown by the armies of Morocco.

The Songhay were a mixture of the white and black races; and their descendants have black or brown faces and long kinky hair. There are now many Fulahs among them.

The people of Timbuktu remind us of those we saw during our travels along the Mediterranean. There are Moors in burnouses, Arabs in turbans and gowns, Tuaregs in veils, dark-faced Jews, and negroes of every description. There are women and girls, with faces unveiled, wearing long gowns which fall from their necks to their feet, and children dressed much like those we saw in the valley of the Nile. These people are Mohammedans. There are many sheiks and priests, and we hear them call the hours of prayer from the mosques.

Every one is polite, and we have little trouble in seeing what we want if we are polite in return. We visit the warehouses packed full of dates, salt blocks, ivory tusks, and bales of ostrich feathers. There are also European goods of many kinds, and especially cotton, hardware, and arms.

We watch the loading of the camels which are to start across the Sahara. Many of them are only half loaded when they start out. We ask why this is, and are told that the rest of the burdens will be made up at the salt mines on the way. On one of the caravan routes, in the midst of

the Sahara, there is a mine of rock salt which supplies many of the oases and a large part of the Sudan. The salt is dug out in great lumps and then trimmed into blocks, about a yard long and a foot and a half wide, in which shape it can be easily packed on the backs of the camels. The salt is thus brought to Timbuktu, and is shipped from here to all parts of the Niger basin. We have seen it sold in the village markets, where the blocks, broken into pieces, always command a good price.

We are more than two weeks going from Timbuktu to Jenne. The river flows close to the desert most of the way, and on both sides of it are irrigated farms. Jenne stands on an island surrounded by branches of the Niger, its people owning most of the lands for miles about. It is better built than any other town we have seen since we left Egypt. Its streets are wide and its houses are of brick of one and two stories, and so plastered within and without that a house looks as though it were cut from one block of stone. Most of the buildings have flat roofs, and some have clay pipes extending out over the street, to carry off the water when it rains.

Jenne is a busy city. It has large mosques, warehouses, and stores. There are crowds at the wharves loading and unloading boats, and donkeys, with packs on their backs, go in long files through the streets. There are many men carrying burdens, and, at certain times of the day, the business sections are crowded.

We spend some hours in the market, an open place in about the center of the town, with shops on three sides of it and a mosque on the fourth. Here are hundreds of people buying and selling. Women and men sit on the ground

with their wares spread about them. Money changers, with piles of cowrie shells before them, stand ready to exchange them for gold and silver. Here are two boys peddling sweetmeats and cakes, and beyond them a butcher, who stands in front of his shop, with joints of meat hung from its roof and live sheep behind ready to be killed and cut up, according to the demand, into roasts and chops. Near the butcher shops are little ovens, upon which one may roast his meat free of charge, if he buys his wood from that fuel seller next door.

"Here are two boys peddling sweetmeats and cakes, . . ."

We spend some time in the cloth stores, purchase some perfumery at one of the scent shops, and stop awhile to look at the barbers shaving the heads of their customers out in the street.

Later on we go to the great mosque, where the worshipers are praying, and on the same day see a Mohammedan school. The children squat about their teacher out in the street and write sentences from the Koran, singing them again and again to commit them to memory.

These people are famous among the central Africans for their learning. They are also celebrated as traders, and their boats, loaded with goods, carry much of the commerce of this part of the world.

From Jenne we travel some distance farther up the Niger by boat. We then cross the country by caravan to the little railroad built by the French. This takes us to Kayes on the Senegal, where we get steamers for the port of St. Louis on the Atlantic Ocean.

28. THE SPANISH POSSESSIONS

WE might take a ship at St. Louis and travel northward to visit the territory which Spain has on the west coast. The trip, however, would be much out of our way, and as the country is about the same as some through which we have traveled we shall not take the time.

The Spanish possessions begin in the neighborhood of Cape Blanco (blăn′kō) and extend several hundred miles northward to Morocco and eastward far into the Sahara. Their territory altogether is equal to about six States the size of Ohio, but the greater part of it is sandy wastes, without rivers or any large oases. It is consequently thinly populated, its inhabitants being somewhat like the Tueregs and the other people we saw during our travels in the Sahara.

Spanish Africa is ruled by the governor of the Canary Islands, with a subgovernor at the town of Rio de Oro (rē′ō dā ō′rō), on the coast.

In addition to this territory, Spain has the island of Fernando Po (fĕr-nän′dō pō) and several other little islands in the Gulf of Guinea; and also a small tract on the mainland between Kamerun (kä-mārōōn′) and the French Kongo. Both the islands and the coastal territories are unhealthful. The land is swampy; it is covered with a luxuriant vegetation and contains vast forests, from which are gathered india rubber and palm oil. Its only foreigners are some Spanish, French, and English merchants. The natives are negroes of a low type, being much the same as those of Kamerun and the French Kongo, whom we shall see farther on in our travels. These possessions have but few harbors, and the rivers are generally unnavigable.

29. THE HOME OF THE NEGRO

OUR next journeys are to be in that part of Africa which might be called the true home of the negro. We shall travel southward along the Atlantic Ocean and eastward and southward along the Gulf of Guinea, until we come to the great river Kongo, up the valley of which we shall go for thousands of miles.

So far the people we have met have been largely of the white race, although there were many negroes among them. From now on they will be almost all black. They will have woolly hair, black skins, thick lips, and flat noses, not unlike the pure Africans of the United States. Indeed, it is from this region that most of the slaves of our country, South America, and the West Indies came. They were

bought or captured by slave traders who came to the Gulf of Guinea and thence carried their cargoes to Portugal and across the Atlantic, or directly across the Atlantic to Brazil, the West Indies, and, at times, even to our own ports. One region furnished so many slaves that it was known as the Slave Coast, although slaves were taken

Native village.

from all the countries of western Africa and at one time from all parts of the continent.

The land along the Gulf of Guinea is very unhealthful. It lies near the equator, and much of it is low and swampy. Nearly all Europeans or Americans who stay long are attacked by fever, and many die. Nevertheless, the blacks thrive. There are many millions of them in this region. They are divided up into hundreds of tribes, each having its own semibarbarous customs.

The tribes are different from one another in form, feature, and language. Some are tall and well formed, having full chests and broad shoulders. Others, such as the Kroos (krōōs), found in Liberia and along the coast, are shorter, but are very strong, being employed to load and unload the boats at the ports. Nearer the Kongo are dwarfs or pygmies, little black people who, when full grown, are no larger than our boys and girls of fourteen.

The natives of the coast, where they come in contact with the whites, and in the north, where they mix with the Mohammedans, wear more or less clothing; but in the wilds of the interior many go almost naked, wearing only a waistcloth or petticoat of bark or skins. At the ports we shall find people fully clad in bright-colored cottons from Europe. The women wear bandana handkerchiefs about their heads, and the gayer their calico dresses the better they are pleased.

All are fond of jewelry, and in some tribes the jewelry is valuable. This is so in the countries which produce gold, where we may now and then see men and women wearing bracelets, anklets, or earrings of gold. In other regions the men have bracelets of ivory, and along the lower Niger the women have heavy ivory anklets, through which their feet were thrust when they were little girls, and which can not now be taken off. In some tribes they wear brass rods, as thick as stair rods, wound about their legs from the ankles to the knees. Such rods are often welded about the leg when the woman is married, and kept there for the rest of her life. Many natives wear necklaces of glass beads; others have cowrie shells, either strung or sewed upon cloth, as head ornaments.

Among the oddest of the negro customs is the way of arranging the hair. Although all the tribes are woolly-headed, each person seems to have his own peculiar headdress. Some stiffen the hair with oil and clay, and then put it up in curious shapes. In one tribe the women plait the hair so that it hangs from the head like little black worms, in another they wind it up in a knob on the crown, and in

". . . each person seems to have his own peculiar headdress."

a third they dress it so that it stands out like two antelope horns, or rises from the top of the head in a pillar or tower. Some tribes shave their heads in spots, and others wear the hair so that it spreads out like a fan. The men grow no hair on the face except, perhaps, a tuft on the chin, which makes them look curious.

Most of these negroes are tattooed, and many have peculiar scars on their faces and breasts. It is said that one can tell to what tribe a person belongs by the scars

on his face. The scars are made in youth, coloring matter being rubbed into the wounds, so that the marks are indelible.

These different negro tribes live in villages of mud huts, thatched with straw or palm leaves. Sometimes the villages are surrounded by mud walls, and sometimes the huts of a family will be built inside a wall; so that a village is made up of a great many walled spaces, each given up to one family.

". . . it stands out like two antelope horns . . ."

Several villages are often governed by a chief or king. Some of the tribes are large, having armies which keep order and engage in slave raiding and wars with their neighbors. The king of Dahomey (dä-hō-mā), for instance, is said to have an army of women who are as brave as any army of men. The king picks out his soldiers when they are girls, and has them trained. They are taught to shoot and fence, and to endure all sorts of hardships. They are not allowed to marry, and their whole lives are devoted to warfare.

Many of these negroes have little farms about their villages, where they raise millet, rice, peanuts, sweet pota-

toes, yams, and Indian corn. They cultivate the soil in a rude way, burning the ground over to clear it, and digging it up with native spades and hoes. The women do most of the work, and in many tribes they are little more than the slaves of their husbands. Nearly every man has several wives, and the more wives he has the richer he is thought to be, for his wives can work for him. We frequently see women hoeing in the gardens; they carry great burdens on their heads, and even paddle canoes, with babies slung to their backs. Near several of the ports plantations of cotton and cacao have been set out, and both women and men work in them.

In some of the negro tribes the people are skilled in weaving and working in leather, in others they smelt iron and make things out of brass and steel. They mold pottery for their cooking utensils and carve ivory and wood. Parts of the country contain gold, which the natives wash from the streams. Other tribes have many hunters who kill elephants and hippopotamuses, and there are robber tribes who hire themselves out as fighters and slave raiders.

In the interior of this country slavery is practiced, although the foreign governments are trying to do away with it. There are also regions where the people still eat human beings, chiefly slaves and those whom they capture in war.

Nearly every tribe along the Gulf of Guinea, and throughout central and southern Africa, believes in charms and witches. The natives think there are spirits in the trees and bushes, in caves and other places. They have witch doctors who pretend to tell whether a man or woman is a

witch, and who cause persons to be killed by accusing them of witchcraft.

Nearly everybody has one or more fetishes, or charms, which will, he thinks, protect him from harm, bring him good luck, or enable him to defeat his enemies or drive away sickness. The African boy hears of such charms as soon as he is able to talk. One of his friends, for instance, has a fetish which he says will make him rich; another may have one to keep away witches; and others those which stop or bring rain or enable one to discover theft. As the boy grows older he wants a fetish of his own; and he goes to the charm doctor and learns how to get or make one. He soon comes to think that the charm is the most important of his possessions, and that if any one gets hold of it he might cause his death. He pretends to feed it, and if he has bad luck, he thinks it is caused by the charms or fetishes of his enemies which may be more powerful than his own.

Witch doctor.

Such charms are made of all sorts of things. A bit of hippopotamus tooth, elephant skin, or an ostrich feather may

be used, also snakes' heads, hawk claws, horns of small antelopes, stones, seeds, nuts, and beans, or other things made of bone and wood. Many of the charms are images of human beings rudely carved, some small and some large.

Worshiping a fetish.

A town will often have as its charm a large image, which it keeps in a shed, and which the people suppose protects the town. They think such an image enables the witch doctor to detect thieves, and on account of it the people are afraid to steal.

The natives of central and southern Africa are grossly

Mission school.

superstitious, and in some places they even make human sacrifices. In some regions cannibalism has been practiced for ages. Henry M. Stanley, the explorer, found human flesh for sale in the markets of the Kongo valley, and other travelers tell how slaves were fattened for food and how warlike expeditions were made in order that the captives taken might be eaten. Such customs still prevail in some regions, although they are fast dying out. In nearly all parts of the country, however, missionaries are now working. We shall see mission schools as we go on with our travels. Some of the people are already more civilized than they were in the past; and under the control of the governments of Great Britain, Germany, and France, to which the chief colonies belong, it is to be hoped that cannibalism, slavery, and witchcraft will in time pass away.

30. SENEGAMBIA, SIERRA LEONE, AND LIBERIA—THE KROOS

WE have left St. Louis and have traveled by railroad through Senegal to Dakar (dȧ-kär′), a French naval station on Cape Verde. We are now on the western end of the continent and as near our hemisphere as we shall be during our African tour.

We find ships at Dakar bound southward along the coast, and take passage. We call at Bathurst (băth′ẽrst), at the mouth of the Gambia (gȧm′bĭ-ȧ) River, in the little colony of Gambia, belonging to Great Britain. The town has about six thousand inhabitants, and among them many people who speak English.

Freetown.

Our steamer stays but a short time and then carries us on south along the coast of Portuguese Guinea and French Guinea to Freetown, the capital of the British colony of Sierra Leone (si-ĕr′rȧ lē-ō′nē). The word "Sierra Leone"

means the "mountain of the lion," so named, it is said, from a great hill back of Freetown, which looks like a lion crouching or ready to spring. Sierra Leone is about as large as Maine. It is a well-peopled country, having numerous tribes

A Freetown village.

who live in villages surrounded by mud walls about eight feet in height. The houses are usually circular huts, roofed with thatch, so made that a part of the roof extends beyond the walls, shading a veranda where the people rest in the daytime.

Much of Sierra Leone is covered with grass, and there are many cattle. There are also antelopes and other kinds of game. Freetown has about forty thousand people, among whom are many English and Germans. The city has several newspapers. It has broad streets, upon which are one-story and two-story buildings of brick and stone, roofed with galvanized iron. Along the shore are great warehouses and factories. There are large steamers at the

wharves, and we learn that the place has a considerable trade, sending ivory, palm oil, gums, and other native products to Europe and importing cotton goods, hardware, and American tobacco.

Sierra Leone women.

We call upon the governor of the colony, see the black native soldiers directed by British officers go through their exercises, and spend some time in the English stores laying in supplies for our journey. We visit the market, where we buy delicious pineapples, oranges, and other fruit, and pay a porter a few cents to carry them on his head to our ship.

Leaving Freetown, we steam on to the negro republic of Liberia (lī-bē′rĭ-ȧ). This territory is about five hundred miles long, and in some places it stretches inland for two hundred miles. It is as large as Indiana and is noted for its fertile soil. It has a population of more than two million negroes, mostly savage tribes who are ruled by chiefs. They are much like the other natives we have seen.

In addition to the savages, Liberia has about sixty thousand negroes who are more or less civilized. They

are especially interesting to us, for many of them are the descendants of negroes from the United States. This republic was founded by citizens of the United States, who gave it the name Liberia, which means the "land of the free." Our people thought that if some of the American negroes were sent back to Africa, they could found there a republic where they would live happily and civilize their neighbors. Liberia was chosen as the place, and a government was planned, modeled upon that of the United States. This is the government of Liberia to-day. The country has a president and congress at Monrovia (mŏn-rō′vĭ-ȧ), the capital, and the civilized negroes are governed by them. The officials are elected by the people, but only negroes are allowed to vote.

Our ship calls at Monrovia, and we have time to visit the president and see the congress in session. We learn that the experiment has not been a very great success. Monrovia has but five thousand inhabitants, and the civilized negroes have only a few villages along the coast. They have small plantations of coffee, but there are no large farms, and the territory governed as a republic is comparatively small.

Liberia is the home of the Kroos or Kroomen, who are famous as sailors. They are to be found on all the ships along the western coast. They manage many of the boats at the ports, and they may be seen everywhere loading and unloading vessels. They are fine-looking black men, strong and muscular. We have some on board, and gangs are at the wharves at each stop of the steamer. Every Kroo has a broad, blue streak extending from his forehead to the end of his nose. We are

told this is a tribal mark put there by his mother in infancy, and that it is intended as a pledge that its owner will die before he will submit to slavery. Very few of the Kroos ever become slaves. They are industrious and thrifty. Some of them speak English, and we enjoy talking to those who are on the steamer.

Each part of the shore, along which we are now traveling, once had its own name. Off Liberia was the Pepper Coast or Grain Coast. Farther on, bordering the French

Monrovia.

possessions, was the Ivory Coast; off Ashanti was the Gold Coast, and farther still the Slave Coast. The Grain Coast was so named because there was a kind of pepper or grain which came from there which was used for export; the Ivory Coast furnished many elephants' tusks; the Slave Coast was the favorite resort of the slave trader, and back of the Gold Coast much gold has been found.

We sail from Monrovia along the Ivory Coast to Ashanti, where we call at Akkra, the port, and thence make our way inland to Kumassi (kŏŏ-mäs′sĭ), the capital.

This region now belongs to the British, and there are many English companies trading and mining in it. There is a railroad from Akkra to Kumassi, and roads are being built through some parts of the country.

We take interpreters at Akkra and travel here and there, studying the land and the people. The country is beautiful, there are hills and valleys and great plains. There are vast forests bound together with vines, in which are enormous baobab trees with white blossoms and a fruit the size of a musk melon from which a drink somewhat like lemonade is made. There are also bamboo and fern trees, and we find bananas, pineapples, and other fruits for sale.

Ashanti is thickly peopled by negroes. There are many villages of mud houses thatched with palm leaves or straw. Some of the villages have mud walls about them, and some are composed of a large number of yards or compounds inside which the houses are built. Sometimes there will be several houses in one compound, some devoted to the slaves or servants, some to the storehouses, and others to the owner and his wives. Such a compound may be the home of one rich man. The poor man will often have only one mud hut for his whole family.

Kumassi is the old capital. It is quite a large place, surrounded by mud walls and divided up by many streets which have been worn into ruts by the bare feet of the people. We visit the market place, where hundreds are buying and selling, making a great noise as they haggle over the prices. They are mostly women and girls, some quite well clad and others having only a cloth about their

bodies fastened tightly under the arms and falling to the feet. Some have babies astride the hip, and others have babies slung to their backs.

The wares are fruits, yams, meat, fowls, and bright cotton cloths. Over there women are selling fuel, medicine, and hardware. Others have pipes and tobacco. Here is a girl with musical instruments, and there an old woman who has a lot of quacking ducks for sale. In other places they are selling jewelry of ivory and gold, bright-colored native cloths, and tools and swords of iron or steel. Here and there through the markets are guards blowing trumpets, warning the people to keep order, and making more noise than all the rest.

There are many Ashanti tribes, some of which are almost savage. In the past the king cut off the heads of his subjects at will, and, in Kumassi, one might often see a score of human heads hung upon poles. Stealing was punished by death, and when the king died a large number of his wives and slaves were killed in order that he might have servants in the next world.

On our way back to Akkra we see flocks of gray parrots and other curious birds. There are many trees which seem to have coffee bags hanging to their branches. We soon discover they are not bags at all, but the nests of the golden oriole, a beautiful bird which lays its eggs in the lower end of the nest, entering it by a hole so placed that only something which flies can get into it. This is to keep the monkeys, which infest the trees of this region, from stealing the eggs.

Farther down the coast we skirt the German colony of Togo (tō′gō), which is densely populated by negroes;

and thence go on to Dahomey, which belongs to the French and is peopled by blacks. In both countries there are many small farms. The natives grow maize, manioc, yams, and potatoes. They have sheep, goats, and poultry, and many small pigs. There are rubber trees in the forests and also oil palms and dyewoods. The Germans have planted cocoanuts along the coast and set out coffee plantations. They have built some short railroads and are trying to develop their colony. The French are also building railroads in Dahomey, and have put up many hundred miles of telegraph lines.

31. LAGOS — A VISIT TO A WEST AFRICAN FACTORY

WE have left Dahomey and have come to the island of Lagos, off the shores of southern Nigeria. We are in the chief British settlement of the Niger territory, and in one of the largest foreign towns of the western coast.

Lagos is quite European in appearance. It has many comfortable houses of one story and two stories, with large gardens in which there are palms and other beautiful trees. It has a wide road along the shore, where we may see English boys and girls riding and driving with their parents. There are quite a number of stores kept by Englishmen and several large trading houses.

The trading houses of western Africa are called factories. They are devoted to importing goods of different kinds from Europe and the United States, and exchanging them

for the native products brought in on boats and by porters from all parts of the country.

The ordinary factory is a large, wooden building with a roof of galvanized iron. It has several rooms, including a store, a cooper shop, and often great caldrons for boiling palm oil. In one part of the warehouse may be seen bales of cotton, boxes of tobacco, bags of salt, packages

A factory.

of hardware, and beads to be sold to the natives; and perhaps in the same room ivory tusks, dyewood, gums, and other such things which have been taken in exchange.

Among the chief exports of this part of Africa are palm oil and the kernels of palm nuts. These products come from the oil palm, which thrives everywhere along the Gulf Coast, and which is so numerous that thousands of natives are engaged in gathering the nuts and making the oil.

The oil palm has no leaves except at the top of the tree, where the fruit grows in great bunches or cones at the base of the leaves. Some of the cones will weigh as much as seventeen pounds each, and a single cone may contain as many as seven hundred nuts, each as large as a horse-chestnut.

A bunch of palm nuts.

The negro climbs the tree with a long hoop of rattan which he fastens around it. He then steps inside the hoop and raises it so that one curve rests against the tree above him and the other upon his back. He now puts his bare feet on the trunk and by a succession of jerks walks right up to the top.

". . . walks right up to the top."

He then cuts off the cones and throws

them to the ground. They are left there for a few days, and the nuts shrink and drop out. They are now boiled in water to remove the outside shell, which is lined with a fiber saturated with oil. The fiber is crushed from the kernels of the nuts in large mortars, and is then placed in clay vats filled with water. The native women get into the vats and tramp the fiber to press out the oil. It rises to the surface and is skimmed off. After this the fiber and shells are again boiled and the oil is skimmed from the surface. It is of a dirty yellow color, but it is so valuable for making soap, axle grease, and other things that it is exported to Europe by the thousands of tons.

The kernels of the nuts are also valuable for the same purpose. They are dried and thus sent to Europe, where they are ground up, and the oil is pressed out of them.

Is not this a wonderful tree? Yes, but it has other virtues in addition to those already described. Its leaves are used to thatch the huts, and from their fiber mats, hats, and other things are made. At the root of the leaves there is a heart called the palm cabbage, which is eaten as a vegetable. When boiled it tastes like parsnips, and its neck is said to have the flavor of the finest asparagus. The natives tap this cabbage when it is on the tree and fasten a gourd to it. A sap, which looks somewhat like ginger beer, thereupon flows out into the gourd. It ferments and in a short time turns to wine. The natives use palm oil for lighting and cooking, and also for greasing their hair and skins.

Another remarkable tree found here and in many other parts of the African continent is the baobab or monkey-bread tree. The baobab is one of the largest of trees. It

is not so tall as some others, but it grows to a thickness of from twenty to thirty feet, and is sometimes as much as one hundred feet in circumference. It has enormous branches, often as thick as the trunk of a great oak, and its blossoms

Baobab tree.

are balls of pure white, four or five inches across. The fruit of the baobab is a gourd fourteen or fifteen inches long, with a stem two or three feet long. The flesh inside is red with a yellowish tint. It has seeds imbedded in it. The natives pound up the seeds into meal, and they use the

shells to carry water or to bale out canoes and to hold salt and other things.

The leaves of this tree when young are eaten as a vegetable. They are a bright green and somewhat like the leaves of a horse-chestnut. The wood is peculiar. It is not good for lumber, as it is composed of fibers separated by layers of pith. The inner bark has so many fibers that it is often stripped off and made into paper. It can be twisted into strings and ropes, and the natives sometimes pull out the fibers and make bags and nets of them. The inside of the baobab tree often rots, so that the tree becomes hollow. In this case it is sometimes used as a water barrel, being filled during the wet season or at the time of a storm, and drawn off when needed, after the rains have passed.

Baobab blossom.

32. THE YORUBANS — SOUTHERN NIGERIA

THERE is a railroad from Lagos into the land of the Yorubans (yō′roo-bäns), one of the largest tribes of southern Nigeria. The road crosses the swampy lagoon which lies between the island and the mainland, and then goes up the valley of the Ogun (ō-goon′) River to the great

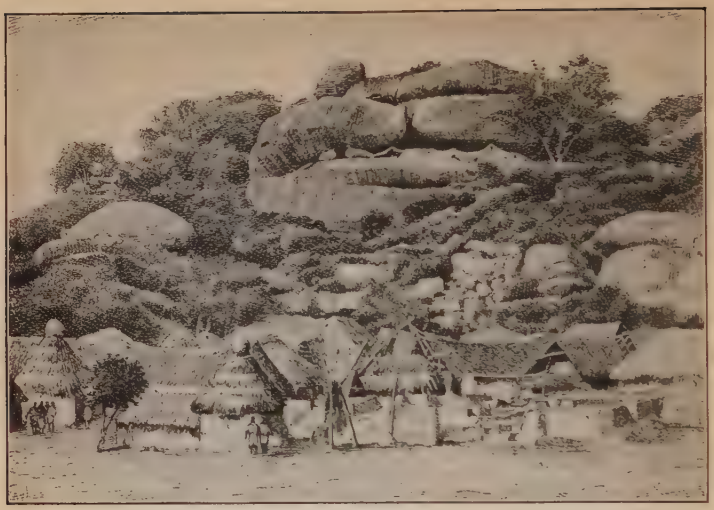
native cities of Abeokuta (ä-bā-ō-kōō′tà) and Ibadan (ē-bä′dàn).

This whole country is a network of streams, and we wind our way in and out over the water ways, now through dense forests where the trees are bound together with vines and now over plains spotted with beautiful groves. We pass villages of huts, made of sticks woven together and covered with mud. The roofs are of thatch, and many of the huts are inclosed by mud walls. Near every village are small farms in which women are working the crops. We see little fields of Indian corn, yams, sweet potatoes, and peanuts, and now and then a patch of sugar cane or tobacco. There are fruit trees here and there; and delicious oranges and pineapples are brought to the windows when the train stops.

Every village has ducks, chickens, and pigeons, and flocks of guinea fowls. In the plains there are sheep covered with hair, some of them so gentle that they trot along like dogs at the heels of the children as they go to and fro over the little farms. We are told that each sheep has its own name; it knows the voice of its owner and will come when it is called.

At last we reach Abeokuta, the largest city of the Yorubans. It has a population of about two hundred thousand, and its mud huts extend for six miles up and down the banks of the Ogun River. There is a mud wall about it, and in its center an enormous rock from which the city gets its name, for Abeokuta means "Under a Rock."

The city is divided into a vast number of yards, with narrow lanes leading here and there through them, but



In Abeokuta.

with no fixed streets. Each yard has a mud wall surrounding it against which the houses are so built that the wall forms the back of each room. The roofs are of thatch, beginning at the wall and extending over the rooms. They are ridge-shaped and so long that they cover a sort of veranda or porch along the front of each house. The people live on the porches as well as inside, while sheep, goats, chickens, and pigs are kept in the yards. Nearly every inclosure has a little pigeon cote, and also posts to which the horses are tied.

Some of the richer Yorubans have large establishments, with many rooms for their numerous wives and slaves. Several families may live in one yard, and some have so many dwellings divided up by courts that a stranger might get lost if the bale or ruler of that yard did not show him about.

The Yorubans are even stranger than their houses. They belong to a race numbering about four millions, which inhabits a large region between Dahomey and the Lower Niger. They are negroes, but more civilized than the natives we met along the coast.

All these people excepting the little children wear more or less clothing. The women are clad in bright cottons. Some have cloths wrapped tightly about their persons under the arms, which fall on one side to the knee, and on the other to the feet. Others have a cloth about the waist and over the shoulders, and some a third cloth tied about the head like a turban. Many of the women have black babies fastened to their shining black shoulders. The little ones laugh and coo as their mothers walk through the streets, work in the fields, or sell goods in the market. Now and then a baby cries, but this does not bother the mother, and it is allowed to cry on.

Some of the men wear loose trousers and cloths about their shoulders; others are bare to the waist, and have only a white cloth around the loins. A few who are Mohammedans have turbans and gowns.

The most of the Yoruban men go bareheaded and all are barefooted. Their features are much like those of our negroes, save that every one has more or less scars. How many bald men there are! That comes from shaving. The men shave not only their faces even to the eyebrows and nostrils, but also their heads. The scars are made in youth, every boy being marked with certain cuts denoting his family and tribe. The people can tell just who a man is by his scars.

In company with the guide we make our way through

the city, watching the natives at work. The Yorubans have many industries. Blacksmiths, carpenters, hat-makers, and tailors are plying their trades in their homes. Here they are smelting iron, there making bags and satchels, and farther on they are weaving bright-colored cloths. These people are noted for their tools, baskets,

". . . we often listen to concerts by native bands."

pottery, and jewelry. Like the other tribes of this region, they are fond of music; and we often listen to concerts by native bands.

We go to the market, where thousands are buying and selling all sorts of native manufactures, together with the grains, fruits, and vegetables raised on the farms. Peddlers with their wares on their heads are moving about, and many are squatting on the ground with their merchandise piled up before them. Notice the cowrie shells. They are the chief money of the Yorubans. It

takes forty shells to equal an American cent. We buy a half bushel, and give them to our guide to purchase curios for us to take back home.

We stop at a cook stand where sweet potatoes are steaming in earthen pots, and afterward eat a cake of corn-meal dough fried in palm oil.

The Yorubans have fine fruits and vegetables. They have delicious pineapples, mangoes, and oranges. They are fond of ekkaw, which is fermented Indian meal boiled in large pots to the thickness of cream. They steam yams and pound them into a paste which is eaten with sauce. Another favorite dish is beans stewed in palm oil; they eat chickens and mutton, and like fat dog meat served with a peculiar sauce.

Wild honey is sold in the market, and also sugar cane, which the children buy and suck as we do stick candy. Nearly every one uses snuff, but here the people put the snuff on their tongues instead of into their noses.

The Yorubans are still wild and savage, although not so barbarous as in the past. They are governed by a native king, under the direction of the British; but they still believe in witch doctors and worship spirits of various kinds. There are many missionaries working among them. They tell us that the natives are improving, but that it will be a long time before they will become what we call civilized.

Taking the train we are soon back at the coast. Our ship moves along the delta of the great Niger River, passing its many mouths. The country is low and swampy, and so unhealthful that we do not attempt to go inland. Our boat stays a few hours at Old Calabar (căl-ȧ-bär′), at the

mouth of the river of that name. It is the British capital of southern Nigeria; and is noted as a trading center from which ivory, palm oil, and other native products are shipped to Europe.

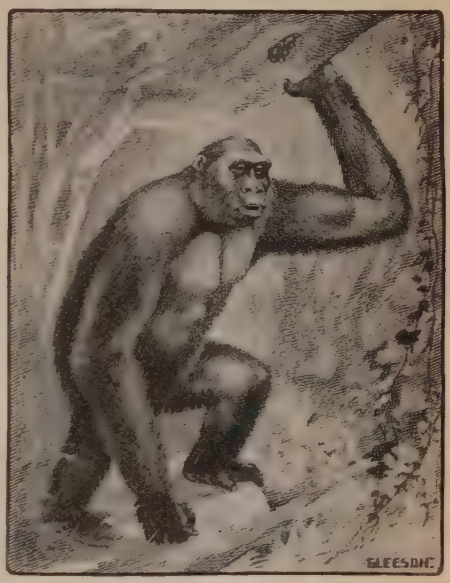
Here we meet Englishmen who have been years in Africa. They describe the negroes who live along the Benue and the lower Niger. They are less civilized than the Yorubans. They worship spirits and believe in witchcraft. Slavery is common, and in the past there have been human sacrifices. The natives wear but little clothing although they have bracelets and anklets of ivory, brass wire, and beads. The products are about the same as in the regions we have recently visited.

33. THE HOME OF THE GORILLA — KAMERUN AND FRENCH KONGO

SAILING southward, we coast for several days along the shores of Kamerun and the French Kongo, two vast provinces belonging to Germany and France. The land near the sea is low and heavily wooded. Farther back a range of great mountains rises above the forests like a wall, and beyond it are high plateaus covered with grass or woods, the home of countless elephants, lions, leopards, antelopes and wild buffaloes.

In the coast lands are beautiful birds, myriads of insects, and gorgeous butterflies; at night the air is alive with fireflies and phosphorescent beetles, and in the daytime strange water birds may be seen along the shore. There are ibises, cranes, and wild ducks, swimming or wading

about the mouths of the rivers, and huge pelicans which are catching fish with their bills and storing them away in the pouches under their necks. They continue fishing until their pouches are full, and then sit sleepily down in the water to digest the catch at their leisure. The pelican's pouch takes the place of our pockets, which we sometimes fill with apples to eat later on.



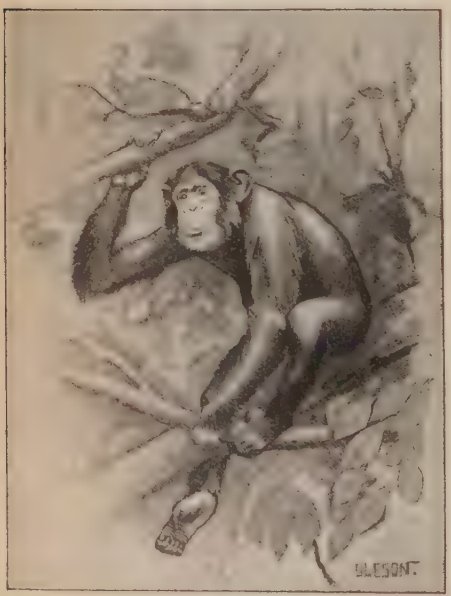
Gorilla.

In the rivers of this part of the world are many crocodiles and families of hippopotamuses, while along the banks of the Gȧbun (gȧ-bo͞on′) and the Ogowe (ō-gō-wā′) are the homes of the gorilla and chimpanzee, the terrible man apes. The gorilla is the largest and fiercest of the monkey tribe. When full grown it is five or six feet tall, and looks not unlike a great ugly man covered with thick reddish brown or black hair. It has an enormous body with a huge chest, and long arms which are so strong that it can take a gun barrel and double it up in its hands. It has hands like a man, with a thumb and four long fingers. Its feet serve also as hands, so that it can climb trees as well as the smallest monkey.

Gorillas are usually found far from the settlements, in the loneliest and darkest parts of the jungle. They live in families; a papa gorilla, a mamma gorilla, and the children gorillas staying together. Sometimes a family will sleep at the foot of a tree and sometimes in it, high up from the ground, making a bed like a hammock by tying the branches together with vines and laying leaves upon them.

These beasts feed upon the fruits, nuts, vegetables, and roots which grow wild in the woods. They eat small animals and birds, being especially fond of eggs, and hunting bird's nests to get them.

Gorillas are very fierce. They shun man, but if attacked will fight to the death. When surprised the children gorillas run away, but the parents stay to keep off the enemy, pounding their huge chests with rage, and roaring with a noise like thunder. They gnash their sharp white teeth, and if they can get hold of one's gun will bite dents in the iron.



Chimpanzee.

Chimpanzees are much the same as gorillas, although not so large. They

usually go about on all fours, but can walk erect better than other monkeys. They climb the trees, swinging themselves from branch to branch.

But what kind of people live in these regions?

We can tell something of the inhabitants from the men at the ports. They are much like the natives we saw along the Gulf of Guinea, with now and then a trader or hunter similar to the people of northern Nigeria west of Lake Tchad.

Native woman.

Kamerun and the French Kongo extend northward to Lake Tchad and the Sahara, the German province of Kamerun being about as large as the whole German Empire and the French Kongo three times the size of France. Both countries have a large population of many tribes. Those along the coast are negroes, while farther back are mixed races with different customs and beliefs. Those of the far west are chiefly Mohammedans.

Some of these tribes are very barbarous. Slavery is common, and in the interior cannibalism is frequently practiced. Among the most important races are the Fans. They are more intelligent than their neighbors,

being especially noted for smelting iron and making knives, spearheads, and axes. The Fans are skilled elephant hunters. They drive the animals into pits and then kill them with spears.

We spend a while at Kamerun, the seat of the German government, under the high Kamerun mountain, and also at Libreville (lē-br-vēl′) and Loango (lō-ăn̲′gō) in the French Kongo. They are small towns, with only a few Europeans, consisting of the merchants and officials, and some missionaries and teachers. The country is unhealthful, and every white man is almost sure to have fever.

We visit the factories to learn about the exports, seeing there great quantities of rubber, dyewoods, ebony, palm oil, and ivory. In the markets we watch the dealers selling peanuts, tobacco, cacao, and coffee from the new plantations near by. Both Germany and France are trying to develop their colonies; and are planting cotton, coffee, cacao, cloves, vanilla, ginger, and pepper. They have established schools and are cutting out roads to open up parts of the country.

34. THE KONGO AND ITS BASIN

WE have left Loango and are steaming along on our way to the Kongo. The ocean is already brown with the silt from the river. The screw of our steamer turns up the green sea from under the brown and churns all to a chocolate foam. We are approaching the mouth of one of the largest rivers on earth.

The Kongo, while not so long as the Nile, is greater in

Southern Africa.

volume than any other river in Africa, is greater in volume than the Mississippi, and is second only to the Amazon. It drains a basin as large as half of the United States proper, and carries down so much sediment every year that, if it could be piled up in one place, it would form a

hill a mile square, and almost as high as the Washington Monument.

The Kongo is as long as the distance from New York to San Francisco, and two of its tributaries, the Kassai (kas-sī′) and the Ubangi (o͝o-bän̲′gē), are each almost as long as the distance from the Atlantic Ocean to the Great Salt Lake. The river has many tributaries, and its navigable water ways, if stretched out in one line, would reach about halfway around the globe. So numerous are the rivers that there is hardly a spot in the whole basin that is eighty miles distant from a navigable water way.

Native village.

From its mouth to Matadi, about one hundred miles inland, the Kongo is more like a long lake than a river. It is five or six miles wide, and in many places three hundred feet deep. From Matadi (Mȧ-tä′dē) to Stanley Pool, about two hundred miles, there is a series of cataracts; but above that to Stanley Falls are more than one thousand miles of open river, upon which steamboats can

travel as well as upon the Mississippi or the lower parts of the Hudson. Still farther inland are long stretches of fine water ways, the river extending on and on, with many tributaries, until at last it is connected by the Lukuga (lo͝o-ko͝o′gȧ) with Lake Tangaṅyika, and by the Luapula

Railway station, Matadi.

(lo͝o-ȧ-po͝o′lȧ) and the Lualaba (loo-ȧ-lȧ′bȧ) with other great lakes farther south, not far from the watershed of the Zambezi (zȧm-bā′zē). On the north the head waters of its tributaries come very close to those of Lake Albert, Lake Victoria, and the other head waters of the Nile.

The Kongo basin is one of the wonders of nature. Except where the river breaks through, it is shut in from the Atlantic by a wall of mountains. There are highlands all about it, and scientists tell us that it was once covered by a vast inland sea from five hundred to one thousand

feet deep, and so large that the evaporation of its waters filled the air with moisture, giving rains to a great part of the Sahara and Libyan deserts.

Then the lake began to overflow at the west, through a sandy pass in the mountains. The waters cut the pass down into the gorge, where the cataracts of the Kongo now are, and before long they made a deep trough out to the ocean. As the gorge grew deeper and deeper, more and more of the waters flowed off until the land was left as it is to-day.

This happened ages ago, and now all the water that falls in the basin is carried out to the sea by the Kongo. The basin is covered with vast forests and grassy plains. It is inhabited by wild animals, birds, and insects, and by millions of more or less savage men. We shall see all this for ourselves as we travel up the river.

The water grows muddy as we steam onward. The green of the sea disappears, and as we enter the wide mouth of the Kongo the river has the color of pea soup. Now we have a strong current, and our ship goes more slowly. There are natives here and there fishing in rude boats far out in the stream, enormous crocodiles are sleeping on the sand banks, and from time to time storks, pelicans, or wild geese fly over us. Now we see a flock of wild ducks, and now white cranes, flying together, float like a great sheet across the sky.

We pass Banana Point, a long, sandy peninsula, formed by the ocean and river, on which some factories or warehouses are located, and steam onward eighty miles farther up to Boma (bō′ma), the African seat of the Belgian government which rules the great Kongo State.

"We pass Banana Point, . . ."

The country is flat and covered with woods. There are many creeks flowing into the river. We pass large islands and numerous sand banks.

We can see Boma long before we come to it. The town has two parts: one, consisting of warehouses and other business buildings, lies close to the water; and the other, containing the public offices, churches, stores, schools, and homes of the foreigners, is on the hills farther back. A tramway with a little steam engine and open cars runs from one town to the other.

Our ship anchors at a long, iron pier, and Belgian officers in uniform come upon board, while black-faced, barelegged policemen in blue Zouave suits and white helmets stay on the pier to keep back the natives.

We land and walk to a hotel in the lower part of the city. Black Kongo boys carry our baggage up to our rooms;

they do not understand English, and we have to make signs to get what we want.

Later we visit the Governor General and his officials to learn about the country and to plan our tour. The greater part of the basin of the Kongo is now a dependency of Belgium. It is known as the Kongo Independent State;

A Belgian and native soldiers.

and it has been divided up into fourteen districts, each of which has a ruling commissioner sent out from Belgium, and some native and foreign soldiers to keep the people in order.

It is estimated that there are thirty millions in the Kongo State, and that more than fifty millions live in the great Kongo basin. The people are more intelligent and more civilized than the negroes along the Gulf of Guinea, and

they differ from them in color and features. Most of them have brown skins, and some have straight noses and small hands and feet. They are usually tall and fine-looking; some have wavy hair while others have little curls like wool. They are Bantus, a mixture of the negro races and the races we saw in northern Africa which long ago crossed over from Asia and gradually populated this country.

Governor General's house at Boma.

The Bantus are to be found about the great lakes and in the valley of the Kongo. They also live in most parts of southern Africa, except in the southwest, where are the little black-skinned Hottentots and Bushmen. They are divided up into tribes, ranging in number from a few hundred families to many thousands, each ruled by a king or chief. Each tribe has its own country, and many have villages.

The Bantus have various habits and customs. Some

are peaceful and industrious, and others are warlike and bad. All are superstitious, believing in witches and spirits. Everybody has his fetish, and every tribe its witch doctor. Many Bantus are cannibals; nearly all have at times held slaves, and slavery is still common in some parts of the country. The different tribes make war upon one another, so that their villages are like armed camps with the people always on the outlook for an enemy.

These people speak a language far different from that of the natives of Morocco, Algeria, and Egypt; a language which is much the same throughout the whole Bantu race, although each tribe has its own dialect.

The Bantus of the Kongo valley to some extent govern themselves, but each district is also under the control of a Belgian commissioner and his agents and officials.

The Governor General at Boma gives us letters to the various commissioners, and by his advice we take one of the government steamers to the port of Matadi. Here is a railroad which the Belgians have built about the cataracts to carry passengers and freight between the ocean and the vast system of navigable waters which extends from Stanley Pool to the different parts of the Kongo basin. The road is only two hundred and fifty miles long; but in proportion to its length it is one of the most important railroads of the world, for it opens up the central part of the African continent.

Our ride is most picturesque. The cars are open at the sides; we go slowly and can see almost as well as though we were traveling in a carriage. Much of the track is far back from the river; and the road curves this way and that as it climbs the hills. Now we cross a great chasm matted

with jungle, now pass through forests where the trees are bound together with vines, and now are so close to the Kongo that we can see the mighty river boiling along through the gorges on its way to the ocean. At last we reach the plateau and then drop to Leopoldville, under the shadow of Mount Leopold (lē′ō-pōld), at the southwestern corner of Stanley Pool. There are half a dozen great river steamers at the wharves, and we learn that we can get ships which will carry us far up the Kongo.

35. LIFE UPON THE KONGO

WE have been traveling for weeks upon the Kongo River, steaming along from village to village, now stopping to visit a market, and now making long excursions into the country to study the people.

After leaving Leopoldville we were several hours crossing Stanley Pool. It is a great lake, right in the course of the Kongo, twenty-five miles long and fifteen miles wide, with many islands. Some of the islands are floating; they are made of reeds and grass, with roots so firmly knotted together that birds and even men can stand upon them. They have been torn from the mainland by the current, and are moving on down toward the sea. Other islands are fixed, and upon some of them are hippopotamuses which have swum across from the mainland.

As we go on up the Kongo in our comfortable steamer, the river widens and narrows. We are often close to the shore, and can observe the strange vegetable and animal life upon its banks. There are many alligators lying like

brown logs on the edge of the water; near them stand hippopotamuses which yawn at us, showing their great teeth, and now and then we see a rose-pink baby hippopotamus on the back of its mother, which is swimming with little more than her nose out of the water.

There are water birds of all kinds. We see storks and wild geese, and now and then shoot at a flock of gray

Natives of Stanley Pool.

parrots as they fly over our boat, whistling and screaming. There are parrots in the oil-palm trees on the banks, and at one of the villages a boy brings several to the steamer for sale. The birds are not so fine as the bright-colored parrots of South America and Australia, but they have a variety of notes and whistle most beautifully.

There are many other birds, the names of which we do not know. There are cuckoos, parrots, and woodpeckers, hornbills, large and small, tree ducks, great kingfishers,

giant herons, eagles, hawks, vultures, and enormous bats. There are pigeons with greenish gray bodies and plaintain birds of bright blue with yellowish breasts; and strangest of all, little crocodile birds which play about the crocodiles on the banks, perching upon them and warning them when any one comes near.

Kongo chief.

And then the animals! We never get tired of looking at the hippopotamuses, especially the babies, which are bright pink, and at the monkeys which hang over the water chattering at us from the trees. Now we see an elephant bathing in the river by moonlight, and now catch sight of a red river-hog or red buffalo peeping at us through the long grass on the banks.

The mosquitoes are terribly troublesome, and when we take a swim in the Kongo there are horrible little black flies which attack us in clouds, settling on every spot of bare skin, sucking our blood. There are ants as fierce as those we saw on the upper Niger, and every night we go over our feet carefully, searching for jiggers. We have to look out for snakes and centipeds, and also for wasps and bees. There are many beautiful locusts, bright-

colored beetles, and butterflies of the most gorgeous description.

The country changes from time to time as we go onward, and our journeys on shore are full of new and strange things. Now we pass through groves where wild flowers are blooming under the trees, and now see woods bound together into a jungle by long vines; there are orchids growing from the branches and trunks of the trees, and many strange climbing plants.

Much of the country is treeless, but covered with grass so high that it is more difficult to travel there than through the forests. The stalks grow so thick that one can not see far, and the blades are so sharp that they scratch our faces. The stalks are often twelve feet in height; so that, as we walk along the paths, we seem to be in a narrow aisle walled with green on each side. Wherever the grass is bent over it twists itself around our ankles, and when it rains the blades become loaded with water, which drops down upon us as we push our way through. The path becomes a ditch, and we walk in a little stream, splashing our way, whipped by the great stalks at every turn.

Such paths serve as the highroads of the Kongo valley, and it is along roads like this that we make our way over the country from village to village. Almost the whole continent is covered with footpaths, and one can go everywhere by following these narrow, winding ways through forest and plain. The natives travel on foot, and the myriad paths have been worn down by the bare feet of thousands who month by month and year by year have, for generations, been going over the same ground, single file. The forest paths are more winding than those of

the open country, and turns are made to avoid fallen trees and other obstacles; but they are everywhere narrow and regularly traveled.

We walk carefully, as we go along single file, looking out for quagmires and pitfalls as we approach the villages, sometimes prodding the leaves on the road to see if the ground is solid. The native tribes are always warring upon one another. The villages are protected by stockades, and along the roads leading to them sharpened sticks dipped in poison are stuck in the ground and covered with leaves which look as though they had fallen from the trees near by. These sticks will run into one's foot if he steps upon them, and the poison is so strong that a scratch causes death.

The people are most interesting. We come upon new tribes every week, and they vary so much in customs and features that we despair of remembering them all. Some are as black as the negroes of the Gulf Coast, and look not unlike them. Some are dark brown and others almost yellow. They all belong to this Bantu race, which we shall meet with everywhere from now on. Many of the men have scars on their faces and other parts of the body. The scars are different in different tribes, and one can tell to what family a person belongs by his scars.

Many of the people go almost naked, and some have little more than a strip of cotton about the waist. The chiefs of some tribes wear enormous straw hats shaped like a stovepipe, waist cloths, and jewelry of brass or shells. The women have short petticoats of grass, which stand out from the body; in other tribes they wear bark cloth or bright-colored cottons.

All grease themselves with oil, and put up their hair with oil and clay. Each tribe has its own way of dressing the hair. In some, the women and sometimes the men wear it in a great horn on the top of the head, and in others they have horns of hair over the forehead. Some twist it on fine wires so that it stands out in every direction like snakes, while others braid it so that it falls down in little tails over the cheeks. They tie cowrie shells, feathers, and other things into the hair, and put it up in knots of all shapes. Some of the men shave their heads all over, or in spots.

All are fond of jewelry. Both men and women wear bracelets and anklets of brass beads or shells. The women often have heavy brass collars around their necks; some have sticks or grass stems stuck through holes in their noses and ears, and almost every one wears a charm of some kind to keep off the evil spirits.

We spend much time in the villages along the banks of the Kongo. There are thousands of them scattered through the great basin, some containing but a few families and others large enough to be called cities. The villages are much like those we have already seen in our travels, being made up of round or square huts thatched with straw. Many of the huts have conical roofs, and in some cases the roofs extend out over the front, covering an open place where the people sit and smoke or sleep during the heat of the day, and where in the evening they gossip and chat.

These people have dances. Every town has its musicians, and they often sing and play far into the night. They live chiefly for the hour. They get up about dawn

and have breakfast. Then the women go to their work in the fields, and the men start out to look up their bird snares and fish traps, or they may have an elephant pit to keep track of. They must also be on guard against hostile neighbors. Some may work at their trades, and both women and men start out early to carry vegetables or goods to the nearest market. At noon every one who is near enough home comes in for several hours' rest and then goes back to work. Toward night they eat the second or chief meal of the day, although they may take a snack or so between times. The evenings are usually spent in chatting, dancing, or other amusements.

"There are little black children everywhere."

There are little black children everywhere. We see them at their games. The babies have rattles. The girls play with rude dolls. They sit on the ground and make mud pies and play at cooking and housekeeping. Even

the small boys on the banks of the Kongo are good swimmers; they learn also to fish, to snare birds, and to shoot with bows and arrows. They gather round us as we go through the villages and wonder at our strange clothing. At one place we let a boy hear our watch tick, and he says the noise must come from an animal inside the case.

Wooden pillow.

These people live simply. Their huts have but little furniture. Only the chiefs and the rich have beds. The others sleep on the ground, often using a wooden pillow. This is a block hollowed out like a bow so that it fits under the neck, raising the head from the ground and keeping the gorgeous headdress from mussing.

There is sometimes a fire hole in the center of the hut, the smoke of which keeps away the mosquitoes. The cooking fires are often built outside, and some houses have also cooking sheds.

". . . the grain is stored in bags tied to the roof."

In many of the villages we see what look like great barrels covered with grass; they stand upon posts with thatched roofs above them. Those are granaries in which the corn and peanuts and other such things are stored

until needed. They are high up; to be safe from the rats, snakes, and other vermin. In other places the grain is stored in bags tied to the roof.

The largest house in the town usually belongs to the chief. It may have smaller huts about it, — the homes of his wives and slaves, — and sometimes a pile of ivory tusks from elephants trapped by the natives.

In many villages there are mechanics, and we learn that they make goods for sale. One town is noted for its pottery, another for its fish nets, and a third for swords, knives, hoes, and farm tools. Nearly every village has its blacksmith shop, which is one of the busiest places in town. The shop is an open shed with a thatched roof, the bellows a rude box of wood and skin, and the anvil a block of iron about as large as a paving brick.

These people smelt iron with charcoal, and shape it with rude hammers. The men are noted for trapping and fishing. In some tribes they think it beneath them to till the ground, for that is woman's work, and so they spend most of their time in the chase or in making war upon their neighbors.

Fighting is so common in the Kongo valley that almost every village has a fence of rude posts about it. The posts are sharpened at the top so that it would be hard to climb over them; they are set close and bound together with vines. There is often a ditch outside the stockade.

The Kongo women have plenty of work. They take care of the houses and do all the cooking. They cultivate the gardens outside the towns, and gather the corn and store it in the granaries. In some places they are

little more than slaves. They are bought and sold, and are often cruelly treated. In many parts of the Kongo slavery is common. Some of the far-away tribes are still cannibals. When such tribes are at war, they expect to feast on their captives, and a not uncommon taunt to an enemy is the exclamation, "You shall rest in my stomach to-morrow."

Many of the Kongo people have some idea of God, but all are superstitious. They fear witches, and believe that their charms and images will work good or evil. Everybody supposes his happiness or misery depends largely upon his charm or fetish; and he who is successful is thought to have a better fetish than others.

These ideas are now passing away. Missionaries are working in different parts of the Kongo basin, and they tell us that many of the black boys and girls are becoming civilized.

Moreover, slavery and cannibalism are being put down by the foreign governments. Now when a man dies the people are not permitted to bury his wives and servants alive with him that he may have them in the next world, as was the custom in the past.

The Belgian government has already established schools where native children learn trades and are taught reading and writing. We see school children frequently as we go up the valley, and find that some of them even know a little geography. They have learned that the earth is round. Their fathers thought it was flat, and that the home of the white man was under the sea, because the ships going away from the coast seemed to sink slowly down into the water and those coming in to rise up out

of it, for the masts were first seen and then the hulls. The little black boys are now being taught that this is one of the best proofs that the earth is a globe.

36. TRADE AND COMMERCE OF THE KONGO

DURING our voyage up the Kongo we observe its great value as a commercial highway. It is the only road by which the products of this vast region can get out to the ocean; and some large European trading companies have established factories and warehouses upon its banks.

A trading factory on the Kongo.

Goods are taken from these stations to all parts of the Kongo basin, and the native produce brought back. In many places this work is done by porters who carry the goods on their heads, marching single file for days along the narrow African paths. In others the goods are carried in native boats on the streams. Upon the Kongo

and its chief tributaries steamers are always moving from station to station, leaving foreign goods to be sent out, and taking on cargoes for the railroad at Stanley Pool.

Before that road was built everything had to be carried on the heads of men past the cataracts to the navigable river below. Now all goes by train to Matadi, where it is transshipped to the steamers of the lower Kongo or to the great ocean steamers which call at Matadi and Boma.

There are now steamship lines connecting the Kongo with Antwerp, Hamburg, Rotterdam, and Liverpool, and the foreign commerce is rapidly increasing. It already amounts to many millions of dollars, and when the interior is further opened up by railway, it will be greater still.

The most valuable product which the Kongo now gives to the world is rubber, after which come palm nuts and palm oil and ivory in the shape of elephant tusks. Other exports are peanuts and coffee and copal, a gum that is used to make varnish. Tobacco is grown in all the native villages, and it may become an important article of trade. The Kongo rubber comes chiefly from vines, while that of the Amazon, the best rubber of the world, is from forest trees. The vines are tapped or cut, and the milklike sap oozes out; it is boiled in iron pans and made into great flat cakes for export.

In exchange for their products the natives take food, bright-colored cottons, hardware, arms, and gunpowder. We shall see these various things in the markets, which are held once every four or eight days in almost all parts of the Kongo basin. The African week is different from ours. It has but four days, and market day is considered the most important of all.

Suppose we visit a market and see how the Africans do business at home. They are great traders and will go miles to buy or sell. Thousands of people are often to be found in one market, some of whom have traveled days for the purpose.

We hear the din of the buying and selling long before we reach the market. It is situated in a grove of shade trees out in the country. There are hundreds of black men, women, and children, scantily clad, moving about under the branches. Some are sitting on the ground with pots and baskets before them, others have their wares piled upon a carpet of leaves, and still others have rude tents or shelters to keep off the sun. Some are bending over, arranging their merchandise; some are carrying it on their heads from place to place; and some are going to and fro, sampling the wares and buying goods to take home. There are many women among the purchasers, and not a few have babies tied to their backs or sitting astride their hips, as African babies are usually carried.

How noisy it is! The whole market seems to be shouting at once. The people scold as they buy; and the women fairly scream at each other. Those peddlers with goods on their heads are crying their wares. That man over there is telling a story, and the women about him are laughing. See, they have thrown back their heads and their white teeth show out against their dark faces. Step aside for that man with the sheep on his head! You must not get angry if you are jostled here, for these people do not consider it proper to quarrel on market days.

Strolling about with our guide, we make our way from one class of peddlers to another. The market is so

divided that each kind of merchandise has its own quarter. Here they are selling tobacco and kola nuts, there, peanuts and bananas, while farther on are sweet potatoes, manioc, cabbages, pumpkins, and Indian corn. We fill our pockets with peanuts, and each of us buys a stick of sugar cane to eat as we move onward.

"What are those round dumplings piled up on the ground?"

What are those round dumplings piled up on the ground? They look like loaves of unbaked dough. That is the chief bread of the Kongo. It is made of manioc, a root much like the sweet potato, only larger. The manioc is first mashed to a pulp and then soaked in running water for twenty-four hours to wash out a bitter acid contained in it. After this the pulp is allowed

to ferment, and then is mixed into a stiff paste. When cooked, it is sliced up and fried in palm oil, butter, or peanut oil. It now looks and tastes like sour dough. It is very nutritious.

In one quarter of the market are the butchers with fresh meat, and near them are live sheep and goats and also pigs, chickens, and ducks. The fowls are kept in wicker cages, and beside them are fresh eggs in finely plaited baskets. The sheep are beautiful animals, but I venture to say you never saw such sheep before. They are covered with fine long hair. Is this not a strange country where the men, women, and children have wool on their heads and the sheep grow beautiful hair?

We buy spear heads and knives of native make from the blacksmiths, who show us also collars and bracelets and anklets of brass. Some of the women about us wear brass collars, each of which weighs many pounds; they are welded on to their necks, and have to be broken before they can be removed. In another quarter we buy pieces of the native cloth made in the villages; we notice also beautiful basketwork, fish traps, and meal sieves. Near by are women selling pottery made of red clay, and a man, who has some wooden pillows, offers them to us at a low price.

But few foreign goods are sold in the market. We are some distance back from the river, and such things are rare and costly. Still there are bright-colored cottons from England, knives from Germany, and gunpowder from Belgium. Here, men are trading gay handkerchiefs and glass beads for india rubber, and there, they are trading brass rods for all sorts of native goods.

We observe that the business is largely a matter of barter, and that no money passes. The several articles are traded one for the other, sometimes at a valuation of so many brass rods for each. Brass rods have, for a long time, been used as money in many parts of the Kongo basin. Different markets have different articles which pass as currency, and goods and money vary in price according to the fashion and taste of the people. In one village blue beads will buy more than white beads, and in another the standard of value is red cotton handkerchiefs. In some markets cowrie shells, such as we saw along the Niger, are commonly used, while still farther on bright-colored calicoes, needles, and pins, brass tacks, or pieces of wire will buy what we want. One of the most valuable things sold everywhere is salt. In this market a pint cup is the wholesale salt measure, and we are assured that a very little salt is a fair price for a slave boy or girl.

37. IN THE GREAT AFRICAN FOREST—PYGMIES

TRAVELING on up the Kongo, we enter the great African forest, one of the largest and most terrible on earth. It covers the whole region of the upper Kongo, extending southward to the watershed of the Zambezi, northward to that of the Nile, and eastward almost to Lakes Tanganyika and Victoria. It is as big as eight States the size of Ohio and is about forty times as large as Massachusetts. The region is so vast that we can hope to explore but a small part of it, and we confine our tour

to the river and to short excursions off into the woods. Only a small part of this forest has ever been trodden by white men. When Henry M. Stanley, the famous explorer, crossed Africa, he traveled through it, and other explorers have visited parts here and there.

We can learn something of the nature of the forest as we move slowly along, close to the banks of the Kongo. The dense trees come right down to the river and extend out from it for hundreds of miles. The trees are so thick, and their branches so interwoven, that they shut out the sun. We can see inland but a few yards from the banks, and when we go off into the midst of the forest we find it like twilight at noonday. The trees are of all sizes, some of them being almost two hundred feet high. They are bound together with ropes and cables of vines, which wind about them like snakes and hang down in long strings.

It is hot everywhere. The breeze is shut out and a warm vapor rises from the moist ground. Many of the trees wear a thick coat of moss and some have orchids and other air plants hanging to them. Here is one which has been struck by lightning; those saplings beside it have been broken down by an elephant herd which has crashed its way through. On the opposite side of the path are trees with great balls of gum oozing out of holes which the birds have pecked.

The ground is covered with fallen branches and dead trees. Our feet sink into the decaying vegetation; we soon grow weary and sit down to rest on the dead trunks which lie all about us. We do not sit long. The decayed wood is full of ants and other insects, which attack

every inch of bare skin, biting us terribly. We have to look out for the wasps overhead; and we soon learn that the forest is alive with mosquitoes, flies of all kinds, and beetles and worms without number. We examine our feet every night, seeking for jiggers, and at times the ants bite us so that our skin stings as though whipped by sharp nettles.

There are many monkeys and squirrels. There are wild pigs and wild buffaloes, herds of elephants and bush antelopes, wild cats and rats of immense size. At night the air is alive with bats and in the daytime strange birds fly through the trees.

"Have you ever heard of the pygmies?"

But what kind of people live in this great African forest? There are many tribes much like those we saw in the lower parts of the valley; and there are others so strange that if we did not see them ourselves we could hardly believe they exist.

Have you ever heard of the pygmies? They are a race of little people found in different parts of Africa, and especially in this great Kongo forest. Pygmy men and women are not larger than fourteen-year-old American children, and the boys and girls of our age will not reach to our shoulders. Many of the women are under four feet in height, and some are only a little more than three feet. Still they are well formed, and look like other men and women. Some pygmy men have beards, and many of the little

women go about carrying their babies on their backs or astride their hips.

The pygmies are of different types. Some tribes have light brown skins, with hair almost red, while others are as black as our boots, with black hair. The black pygmies are usually the taller, although they are not so good looking as those of lighter color, having heavy jaws, deep-set eyes, and flat noses. The lighter ones have large round eyes, round faces, well-formed figures, and small feet and hands, with long slender fingers.

These people wear but little clothing. The men have only a strip of cloth about the waist, and the women a short petticoat of leaves or an apron of bark. Some pierce holes in their upper lips and put porcupine quills and the teeth of various animals in them.

The pygmies are in a low state of civilization, and live more like beasts then men. They seldom clear the land, and have no farms or gardens. They have little villages, going out to hunt and trap and dig roots and other things for food. Their villages are usually not far away from the settlements of other tribes, and in such localities the pygmies often steal corn, tobacco, and bananas from their neighbors. If their thefts are not noticed, they may come back and leave skins or ivory to pay for the food they have taken.

These villages are different in different tribes. Some of the little people live in caves, others put up shelters to serve for a short time only, and move about from place to place. Some tribes arrange their dwellings in a circle around a cleared space in which the chief's house stands; and others build their huts in rows.

The ordinary hut is seldom more that four feet in height and four or five feet in diameter. It is often made in oblong shape, being formed of branches stuck into the ground and tied together at the top, and then thatched with leaves or grass. The doors are so low that the pygmies have to crawl in.

"They are expert trappers and hunters."

These little people sleep on the ground or on beds of leaves spread out inside the hut. Some of the huts have two doors, one in front and one behind, in order that their owners may escape when attacked.

Most of the villages have pitfalls and poisoned sticks about them as a protection against their enemies. The pygmies use poisoned spears and arrows, and a scratch from one of these will often cause death. They are skillful bowmen, shooting arrows so fast that the first one

will often not have fallen to the ground before the third has left the bow. They are expert trappers and hunters. They catch all kinds of birds and trap elephants in pits. They shoot the eyes of the elephants with their little arrows, blinding them; and then follow them until they fall. They hunt birds for their feathers, and antelopes and monkeys for meat and skins.

The pygmies eat flesh of all sorts except that of man. They are fond of monkeys, rats, birds, and reptiles. They eat snails, white ants, bee grubs, and the larvæ of certain beetles. They roast their meat on the coals and smoke some of it to preserve it for future use. The women usually do the cooking and the men hunt, trap, and fight. The boys are always practicing with bows and arrows, and, as soon as they are old enough, their fathers take them out and teach them to hunt.

The pygmies have no language of their own; but usually talk, more or less imperfectly, the tongues of the neighboring tribes. They are droll little bodies, elfish and full of fun. They are fond of singing, and have drums made of sections of a hollow tree, covered with skin. They are intelligent and quick to learn, but timid and afraid of all other tribes except their own. They try to return kindnesses, but are spiteful when ill-treated, and will wait a long time to revenge themselves upon their enemies. They remind us of the gnomes and sprites we read about in fairy stories.

Pygmies somewhat like these are found in southern Africa and also near the great lakes and in the French Kongo. Some live in Madagascar, where they climb trees like monkeys and swing themselves from branch to branch.

They are also found in the Andaman Islands, in the Bay of Bengal, and in the Philippines, where they are known as Negritos, or little negroes.

38. THROUGH GERMAN EAST AFRICA TO THE INDIAN OCEAN

WE have left the Kongo, and have traveled across the country to the west shore of Lake Tanganyika. We have gone to the other side of the lake to the great native trading town of Ujiji (o͞o-jē′jē), and are now about to make our way by caravan over the plateau which lies between us and the Indian Ocean.

We are in German East Africa, the most valuable of the German territories on this continent. It is about twice as large as Germany in Europe; and it extends from British East Africa, including about half of Lake Victoria, on the north, to Portuguese East Africa on the south and from Lake Tanganyika to the Indian Ocean. Along its western border runs the huge trough in which the great lakes of Africa lie. At the north is Victoria, which we have already explored. Four hundred and fifty miles farther south is Tanganyika, the longest fresh-water lake of the world, and still farther south is Lake Nyassa (nē-äs′sà), almost as long.

Lakes Nyassa and Tanganyika have steamers upon them. They are very deep and are more like mighty rivers than lakes, being bounded by mountains, with steep shores. Tanganyika was long supposed to have no outlet; but we now know that it flows at times into the Kongo through a gap in its western wall. The waters of Nyassa flow off into

the river Shire, a tributary of the Zambezi, so that we could go southward to that lake and thence by boat to the ocean, through the Portuguese possessions.

The greater part of German East Africa is a high and comparatively healthful plateau. There is a low plain bordering the ocean; but back of this the land rises, opening out into woods and almost sterile plains covered with grass or bush. There are many wild animals upon the plateau, including elephants, lions, giraffes, and antelopes. There are also ostriches, which furnish feathers for export.

German East Africa is fairly well populated. We shall find villages all along our route from Ujiji to the coast, and we learn that there are many different tribes in the several parts of the country. The people are more intelligent than those we met on the Kongo. In the north they have little farms and herds of cattle and sheep. Their villages are surrounded by walls of mud or stockades of posts. There is often a moat outside the walls, and commonly a place in the center where the cattle are kept at night.

The huts are sometimes round and sometimes square; but they are all small and made of mud or wood thatched with leaves or grass. Many of the people keep their animals with them in their dwellings; goats, sheep, chickens, ducks, men, women, and children living together.

The natives dress according to the tribes to which they belong. Some have clothes of skins, some wear aprons of bark, and some have only a fringe of grass about their waists. All are fond of jewelry, and many wear great rings of copper, brass, or iron upon their necks, wrists, or legs. They have odd ways of dressing the hair, and nearly all wear a thick coat of grease on their bodies and heads.

Some of these people raise maize, sugar cane, tobacco, and manioc. Nearly every village has bananas growing about it, and some have little granaries where millet, corn, and other things are put to be kept from the animals. Some of the people have bees, and nearly every one has chickens.

The natives are good blacksmiths, smelting and hammering out spears, knives, bells, and rude axes and hoes. Some

Dar es Salaam.

of the tribes between Lake Tanganyika and the Indian Ocean are traders. They make a regular business of carrying the native products across the country to exchange them for European goods, which they bring back to sell.

Ujiji, where we now are, is one of the chief market stations. It lies at the western end of the great trade route which begins at Bagamoyo (bä-gȧ-mō′yō), on the sea-coast opposite Zanzibar, where for many years the ivory of central Africa has been carried on the heads of porters to

be sold to European traders. It is over this trade route that we make our way in a long, single file. Now we stop at a village, and now camp out at night in the wilds. We visit Tabora (tȧ-bō′rȧ), a native trading town where many roads cross, and stay awhile at Mpapwa (m'pä′pwȧ), another thriving station in the eastern part of the plateau. There are German officers at both places, and they aid us on our way to the coast. Finally we reach Bagamoyo, where we

Government House.

find a number of Europeans, and feel more at home than we have since we left Boma, at the mouth of the Kongo.

It is still more homelike at Dar es Salaam (där ĕs sȧ-läm′), situated a little farther down the coast on a beautiful bay. Dar es Salaam is the capital of German East Africa. A few years ago, when the Germans took possession of the country, it was but a village of thatched huts. It is now a thriving little city, with public buildings, large warehouses, and scores of native shops kept by turbaned Arabs and queerly clad Hindoos who have come over from Zanzibar.

We stroll along the wide street which borders the harbor, watching the loading and unloading of the great ocean vessels at anchor in the bay. The steamers are taking on ivory, rubber, coffee, and other native products for shipment to Europe, and discharging cotton goods from America, Germany, and England, to be sent by caravan to the interior.

"Some wear long shirts . . ."

As we watch, another steamer comes in from the south; and we notice that Dar es Salaam already has considerable trade. Its harbor is one of the best on the east African coast, and the Germans are doing what they can to make it an important port.

Later, we stroll about visiting the quarters where the natives live. The men have strips of cotton about their waists which fall to their knees. Some wear long shirts and others have gowns and turbans or caps. The women are dressed in bright-colored cottons; but they are all bareheaded, barearmed, and barefooted.

We next go out to see the coffee, vanilla, cacao, and cotton plantations which the Germans have established in

the country near by. Returning, we call upon the governor at his residence, situated in a beautiful garden filled with tropical plants and trees. From him and his officials we learn much about the parts of the country we have not

"The women are dressed in bright-colored cottons; . . ."

been able to visit. They tell us that they are rapidly exploring their territory, that schools are being established in many parts of the country, that telegraph lines have been constructed to Lake Tanganyika and Lake Victoria, and that railroads will some time be built connecting these lakes with Dar es Salaam. They show us that a part of the railroad to Lake Tanganyika has already been constructed and that a short road has been built inland from Tanga (täng'ä), an important port at the northeastern end of the colony. The latter road is not far from Mount Kilimanjaro; and we wonder whether this, the greatest mountain of Africa, may not, like the Alps, sometime be accessible by railroad. A German explorer has

already ascended it and has given the world an account of its wonders.

Kilimanjaro lies on the northern border of German East Africa, halfway between Lake Victoria and the Indian Ocean. It is only a few miles south of the Equator, but its top is so high that it is always covered with snow. The natives who live in the tropical lowlands, where snow never

Kilimanjaro.

falls, can not understand what the white peak means. It is said that they suppose that the mountain is capped with molten silver, and that if they could climb to the top they might bring back a store of that precious metal.

Kilimanjaro is one of the highest of the world's mighty mountains. It ends in two peaks, one of which is almost four miles above the level of the Indian Ocean. The two peaks as viewed from a distance look like a saddle, the taller one, known as Kibo (kē′bō), rising far above the

other. Each peak is a great crater, Kibo being six hundred feet deep and more than a mile in circumference.

The soil about these craters is composed of lava and rock, and farther down the mountain the lava can be plainly seen. The lower slopes are covered with a rich vegetation. The trees at the bottom are bound together with

". . . huts which look like haystacks."

vines, forming a jungle in which are many orchids and other air plants. Higher up, the forests are more open; there are groves and grasslands. Higher still, the vegetation grows scantier and scantier, until at last there is nothing but lava and snow.

The country about Kilimanjaro is well populated. The natives are dark brown in color. They belong to the Bantu races, being divided up into many tribes, each having its own chief or sultan. They are more civilized than

the natives we meet on the Kongo. In some tribes the older people wear clothes, dressing in white cottons and gay colored calicoes. They are fond of jewelry, and the women wear heavy necklaces and anklets of copper or iron wire. The babies go naked, and little boys have seldom more than an apron. These people cultivate the soil, having patches of grain surrounded by hedges. Some of their farms are irrigated from the streams which flow down the mountain.

The villages are composed of huts which look like haystacks. Each house has its own little granary outside it, and nearly every family owns a patch of bananas.

39. ZANZIBAR

THE Sultan of Zanzibar (zän-zī-bär′) once controlled all the territory now belonging to German East Africa. He lived on the island of Zanzibar, which lies about twenty-five miles off the coast, opposite Bagamoyo, and from there, in a rude way, through their chiefs, governed the tribes of the mainland. The Sultan had close relations with Great Britain, and it may be that the British thought that these territories would some day belong to them. In 1885, however, several Germans, disguised as mechanics, made their way through the country and called upon the various chiefs. They made treaties with them, on the behalf of Germany, to come under its protection; and in time the Germans forced the Sultan to give up this territory to them. Zanzibar Island itself still belongs to the Sultan, but it is under the protection of Great Britain.

The Sultan is an Arab. He is the descendant of chiefs who sailed from Arabia, centuries ago, and conquered a great part of eastern Africa. They once controlled all the coast lands from Cape Guardafui to Mozambique (mō-*za*m-bēk′), and their power was felt as far inland as Lake Tanganyika. They established their capital on the island of Zanzibar, and carried on an extensive trade in

Ivory from East Africa.

slaves and ivory, which were brought across the country in caravans to Bagamoyo and thence by boat to Zanzibar, to be shipped to Europe and Asia. The slaves carried the ivory on their heads to the seacoast, and at Zanzibar both slaves and ivory were sold.

At the same time goods of many kinds were shipped to Zanzibar, to be taken over to the mainland for trade with the natives. People from India, Arabia, and Europe settled here to engage in business, and therefrom grew up this

city which is now the largest along the eastern coast of Africa. It contains Hindoo traders, Mohammedan Arabs, and many thousands of blacks who have come from the mainland of Africa to work and trade.

We visit Zanzibar from Dar es Salaam, before beginning our exploration of the lands farther south. A great German steamship on its way north carries us from one port to the other. We can see Zanzibar long before we get to it. It is a low coral island, covered with green. Along the shores are cocoanut and mango trees, with the towers and minarets of mosques rising above them and with wooded hills in the rear. Nearer still, facing the harbor, are the great white buildings of the city, and also the palace of the Sultan, an immense structure, with verandas to each of its three stories and with many windows reaching to the floor.

Coolie girl.

We land and make our way on foot through the streets. They are too narrow for carriages or horses. Some are not more than four feet wide, and we are often crowded to the walls by porters carrying great loads on their backs or heads. The streets are crooked and we wind our way, passing through the strangest crowds we have yet seen. There are dark-faced

men in long gowns wearing turbans, Parsee merchants from India, with their coats buttoned up to their necks and hats like inverted coal scuttles; there are black coolie girls with gold buttons in their noses, and Hindoo girls loaded with jewelry. There are many half-naked natives

"... over roads lined with cocoanut palms."

from the mainland, doing all sorts of work, and the black soldiers of the Sultan in uniform. We also meet Englishmen and Germans, Frenchmen and Italians, and now and then an American.

Later on, we go to the mosques to watch the Mohammedans at their prayers and then visit the Hindoo temples and the English churches. On Wednesday afternoon we hear the Sultan's band play, and, accompanied by the American Consul, are received by his Majesty and taken over his palaces.

During our stay we take horses, and ride out through the island over roads lined with cocoanut palms. Zanzibar

is not large, but it is so fertile that it looks like a garden. It produces tropical fruits, cocoanuts in large quantities, and it has so many clove trees that it may be called the most spicy of all the world's islands. It is estimated that four fifths of all the cloves used are grown in Zanzibar, such exports sometimes amounting to ten million pounds in one year.

Clove trees are set out in orchards and cultivated. They grow to be thirty or forty feet high, and begin to bear blossoms at about six years. The blossoms, which are bright red in color, form the cloves of commerce. They are picked when full blown, and are cured by smoke from slow wood fires. While smoking, they turn to the color of the cloves of our grocery stores. After drying, they are packed up ready for shipment abroad. We see bags of cloves on the Zanzibar wharves, and are told that they are destined for the United States. Perhaps we, ourselves, may eat some of them in our pickles next year.

40. WITH THE PORTUGUESE IN AFRICA

IT is on a German steamer that we travel southward from Zanzibar to visit the Portuguese possessions along the eastern coast. They begin at Cape Delgado (dĕl gä′dō) and extend beyond Delagoa (dĕl-à-gō′à) Bay, a distance of about fourteen hundred miles. The great Zambezi River cuts them almost in half, and the Limpopo (lĭm-pō′pō), or Crocodile River, flows through them not far from their southern boundary. The country consists chiefly of the low coastal plain and the delta of the

Zambezi. It is about eight times as large as Kentucky, but is wild and unhealthful and comparatively unexplored.

In addition to this territory the Portuguese own the Cape Verde Islands and a small possession on the Gulf of Guinea. They have also the province of Angola (ăn-gō′là), which lies just south of the Kongo, runs for one thousand miles along the western coast, and is ten times as large as the State of New York. Angola is somewhat like the Kongo State in character; but the land is unhealthful and of but little value in comparison with some of the African possessions of the British and the French.

One would think that the best of Africa ought to belong to the Portuguese; for it was largely due to their explorations that it first became known to civilized man. Until about the time of the discovery of America the only parts of Africa visited by Europeans were those along the Mediterranean Sea. It is true that the Greek writer Herodotus had published a story of a Phœnician ship which had sailed about Africa, but this was considered a fiction and no one really knew that Africa was a great continent, or that India could be reached by going around it.

During the latter part of the fifteenth century the products of India and other parts of Asia were greatly desired by the Europeans. They were in such demand that they were brought to the eastern shore of the Mediterranean Sea by caravan, and sent thence by boat to the European ports. Such transportation was costly, and it was thought that a cheaper way might be had by a sea passage. Columbus tried to find a new route by sailing

westward, and he started in that direction and discovered our continent. At about the same time the Portuguese sailed southward to find a way to India about Africa. One of their sea captains had journeyed along the east coast to Sofala (sō-fä′lȧ), not far from where we now are; and he had probably brought back the story that the land ended some distance farther south. The Portuguese did not know how far south the continent went, and were not sure that there was a passage about it, but they concluded to find out. One man who was much interested in the work was Prince Henry of Portugal, who equipped so many expeditions that he became known as "Prince Henry the Navigator." He explored the northwestern coast of Africa, and at the time of his death in 1460 had sent ships as far south as the Gulf of Guinea. A few years later Cam (käm), a Portuguese, reached the mouth of the Kongo, and in 1487 another Portuguese, Bartholomew Dias (dē′äs), went to the southern end of the continent and named it the "Cape of Storms," which was afterward changed to the Cape of Good Hope.

The next great voyage was made by the Portuguese, Vasco da Gama (väs′ko dä gä′mȧ), in 1497, or just five years after Columbus started out to discover America. Da Gama rounded the Cape of Good Hope and sailed on to India. His trip created great excitement among navigators all over the civilized world, and his route became the chief ocean highway to Asia.

The Portuguese made many voyages and built up a great trade with India. They established colonies at the Cape, at Sofala, a port on the Indian Ocean then noted for its

ivory and gold exports, at Mozambique, and at other places on the east and west coasts of the continent. Indeed, for a long time they claimed that the most of Africa belonged to them. They warred with the Arabs, who were doing business along the Indian Ocean, and extended their conquests to Zanzibar, Mombasa, and almost to the Gulf of Suez so that the Indian Ocean was sometimes spoken of as the great Portuguese lake.

Later on the Dutch and English built up their trade with India and Asia. The Dutch drove the Portuguese away from the Cape of Good Hope; and they in turn were conquered by the English, so that that country, and the east coast almost as far north as Delagoa Bay, now belongs to Great Britain.

Steaming out of Zanzibar harbor, we are soon again in sight of the low, densely wooded shores of Africa. We pass Cape Delgado, at the mouth of the Rovuma (rō-vo͞o′-ma) River, and a little later are plowing along through the Mozambique Channel, which separates the continent from the great island of Madagascar. The channel is more than two hundred miles wide, and we hence have no view of the Madagascar coast.

Our first stop is at Mozambique, the old capital of Portuguese East Africa. It is a little island covered with houses, so close to the continent that canoes by scores are always plying back and forth carrying food and other supplies. We land and take a walk through the town. How delightful it is after the poor villages of the interior! The streets are narrow, but they are macadamized, and have clean sidewalks paved with cement. The houses are made of stone covered with plaster and are painted red,

pink, blue, yellow, or lavender. Many of the buildings have street lamps bracketed to them. There are little parks here and there, and outside the town is an old fortress reached by a long avenue of wild fig trees.

We call upon the governor, spend a little time shopping with the natives in the markets, and then take a ride in a machilla over the island. The machilla is a reclining chair with a canvas top. It is slung to a pole and borne by two natives, one of whom trots in front and the other behind, carrying the ends of the pole on their shoulders. Our trip is a short one. Mozambique Island is only a quarter of a mile wide and not more than a mile long, so that it takes but little time to explore it.

Now we are again on the steamer and have sailed almost six hundred miles southward along the African coast. We have come from Mozambique to Chinde, near the mouth of the Zambezi, and are about to land at Beira (bā′ē-rȧ), where there is a railroad extending far into the interior.

"We . . . take a ride in a machilla . . ."

"What is that great basket . . . ?"

How rough the sea is! We had a storm last night, and the ship is still rolling. We have come to anchor outside the port, but the waves are high, and we look in despair at the boats which are rising and falling on the waters beneath. We do not see how we shall ever be able to get down to them to be taken ashore.

What is that great basket which the sailors have placed on the deck? They have fastened it to a derrick so that it can be raised and lowered to the boats. The basket is taller than we are. It has a door in the side through which we step in. It will carry three boys at one time if we stand close together. Now the door is closed; and a moment later we feel ourselves rising and then falling, and almost before we know it we are able to step out into the boat far below.

We land and ride through the little town on a street-car cab, pushed from behind by half-naked blacks on the trot. We visit the railroad station, shop at the stores and in the market, and then have dinner at the hotel. We are told that the country back from the coast has excellent hunting. Buffaloes, wildebeest, hartebeest, and quagga roam over the land in vast herds, and elephants and lions are occasionally found. The country is unhealthful for Europeans, and we do not make a long stay.

Our next port is Lourenço Marquez (lō-rĕn′sō mär′kĕs), the most important of the Portuguese towns, situated on Delagoa Bay, almost five hundred miles south. It has one of the best harbors of the southern hemisphere. Delagoa Bay is seventy-eight miles long and twenty miles wide, and there is an inner harbor which is seven miles long and one mile wide with depth enough for large steamers. This harbor is especially important, as it is one of the chief ports for the gold fields and farm lands of the Transvaal (trăns-väl′) and other states of British South Africa. Lourenço Marquez is also the seat of government of the Portuguese possessions.

We are several hours steaming through the bay before we pass Reuben Point into the inner harbor and anchor close to the shore. Our baggage is taken to the custom-house pier, which has great cranes for loading and unloading cargo. It is quickly examined, and a few moments later we are strolling through the chief business part of the city.

The town seems more thrifty than any we have seen since we left Egypt. On the streets are many Europeans dressed in white clothes and straw hats. There are dark-

faced Portuguese, and English, French, Germans, and Americans who have landed here on their way to and from the interior of South Africa, and there are also East Indians, who to a large extent do the retail business of the place. There are also natives in every state of dress and undress.

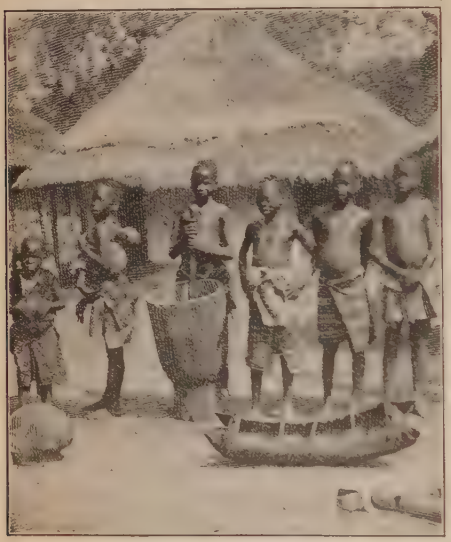
Lourenço Marquez has clean streets, lined with neat, bright-colored houses. We pass red, blue, yellow, and pink buildings in the same block, and spend some time in the park surrounded by houses of all the colors of the rainbow. We visit the Botanical Garden, take a drive to Reuben Point, and in the public buildings have a chat with the Governor General about the country and its people.

He tells us that Portuguese East Africa has about three hundred thousand square miles and a population of more than three millions. The country is divided into districts, beginning at the north; namely, Mozambique, Zambezi, and Lourenço Marquez. It is largely governed by companies which have charters from the king of Portugal to develop it. Almost the whole of it is unhealthful, and it has but few Europeans.

The natives are chiefly of the Bantu race. They are of many tribes, mostly barbarous. In some places slavery still exists, and cannibalism is practiced. Each tribe has its peculiar dress, although all go more or less naked. Along the Shire (shē′rā) River the women make great holes in their lower lips in which they wear ornaments of various kinds. Sometimes they have long nails of brass or ivory thrust through these holes, and sometimes they stretch the holes so that a ring as big as a napkin ring

will fit into it. These people live in villages; they are not unlike the tribes we saw on the Kongo.

We find natives in Lourenço Marquez and see many during our trips through the country near by. The men often have little more than strings around their waists, to which are tied bunches of tails or skins in front and behind. The women wear a cloth about the body from the waist to the knees, and some have a second cloth over their shoulders. They have necklaces of beads, and bracelets and anklets of twisted iron wire. Such wire often covers the arm from the wrist to the elbow, and the leg from the ankle to the knee. They wear bead necklaces, and sometimes bead work on ribbons about their heads. They carry their babies tied to their backs, the little ones bobbing up and down as they move along the road or dig in the fields.



Bantu Boys.

Here as in other wild parts of Africa the women do the hard work. The men are loafers and buy their wives; the man who has several wives expects to live on their earnings. His only duty is to furnish his wives' clothing.

41. BRITISH SOUTH AFRICA

WE are now to enter a new world — the English world of South Africa. So far we have been traveling among black or brown people more or less barbarous, and much of the time in countries so hot or unhealthful that white men can not live in them. This new world has a civilization much like our own, and as its climate is temperate our race thrives here almost as well as at home.

We can see why this is when we consider where this part of the African continent lies upon the globe and its elevation above the sea. The mouth of the Zambezi is as far from the equator as Porto Rico; and the Cape of Good Hope, at the extreme southern end, has about the same latitude as Chattanooga or Los Angeles, so that the lands between these points on the two continents, if they had the same height above the sea, the same winds, and the same general nature, should have about the same climate. There is one difference: South Africa, because it lies south of the equator, has its summer when we have our winter, and its winter when we have our summer.

There are other differences just as there are differences between the lands of the same latitude in the eastern and western parts of the United States; for the winds, mountains, and all the surroundings of a region regulate its climatic conditions. South Africa is made up of mountains and high plains. With the exception of a narrow strip along the coast the whole country is from a half mile to a mile above the sea. Therefore it is much cooler than if it were low.

A large part of it is desert because the water-laden winds, which blow mostly from the Indian Ocean, first strike the cold air of the Drakensburg (drä′kenz-bẽrg) Mountains, which run along the east coast. This condenses their moisture and gives copious rains to the eastern slope and the plain at its feet, making it the garden spot of South Africa. When the winds blow on toward the westward, they are comparatively dry, and for this reason the most of the highlands are almost rainless, having great deserts such as the Karroo (kär-roo′) plateau of Cape Colony and the Kalahari (kä-lä-hä′rī) Desert farther north.

The whole central and western part of South Africa, including German Southwest Africa, has only a scanty rainfall; and although it is healthful, the land is dry, bleak, and bare. The rivers, with the exception of the Orange and Limpopo, are short and dry a part of the year. Even the Orange and Limpopo are almost dry in some seasons; and they have so many rocks, rapids, and waterfalls that they are of no value to commerce. The result is that all transport has to be by rail or in wagons drawn by long teams of oxen and mules.

As the hills are steep and the plateau comparatively difficult of access, it was for a long time unexplored and undeveloped. The settlements began at Cape Town and along the southeastern coast; there the Portuguese and Dutch first came, and after them the English. The English and Dutch gradually pushed their way northward. They found much of the land good for sheep and cattle, and in other places they raised fruit, wheat, tobacco, and grain.

Then diamonds were discovered near the Orange River,

and people came from all parts of the world to search for them. The rich gold fields, which were found still farther north in the Transvaal, brought more people. The country proved healthful, and many farmers came in. Railroads were built, cities and towns grew up here and there, until we now have, in this part of Africa, a civilized land which has thousands of miles of railroads, telegraphs almost everywhere, schools and newspapers, rich farms and fine houses, and nearly everything else which we consider necessary to civilization.

The English have pushed steadily northward, conquering the native tribes and bringing them under subjection. They have also taken over the government of several rich States which were settled by the Boers, descendants of immigrants who came from Holland; and they now own all the vast country south of the Kongo Independent State between Angola and Portuguese East Africa and German Southwest Africa and the Indian Ocean, extending from the southern shores of Lake Tanganyika to the Cape of Good Hope.

This land is divided up into great states or colonies. All are improving, and railroads are rapidly building to the northward with branches out to the ports on the Indian Ocean. The railroad system has already crossed the Zambezi River, and it will go on past the great lakes and through Uganda until it connects with the railroads of the Egyptian Sudan. Then we shall have a trunk line of road from one end of Africa to the other, and shall be able to travel on comfortable cars from the Cape of Good Hope to the Mediterranean Sea. This colossal undertaking is known as the Cape to Cairo Railroad.

When the Europeans first came to South Africa they found three races of natives. Two were small, weak, and of a low grade of civilization; the other was strong and warlike, with kraals or villages of huts shaped like beehives, and herds of cattle and sheep. The two weak races are known as Bushmen and Hottentots; the strong one as the Kaffir race.

The Kaffirs are very numerous in many parts of South Africa. They are Bantus, somewhat like the best of the

Kaffir village.

natives of the Kongo valley. They have brown skins, thick lips, and woolly hair. They are of many tribes, such as the Zulus, the Matabeles (măt-à-bē′lēs), and others which we may meet in our travels. Most of the tribes are thriving, notwithstanding the settlement of the country by the whites. Some Kaffirs have lands of their own with farms and grazing territories; others work in the mines, in the cities, and on the farms.

The two weak races might be ranked with the dwarfs of Africa. The Bushmen are somewhat similar to the

pygmies we saw in the great Kongo forest. Their height is rarely more than four feet, and their yellow faces have features somewhat like the Chinese. Their language is a mixture of clicks and grunts, being often compared to the clucking of a turkey. They live in low huts made of reeds, in caves, or in holes in the rocks. They rely for food upon roots and wild fruits, and upon what they can

Kaffirs.

steal or kill. They are fond of caterpillars, locusts, and grasshoppers, and eat even ants and spiders. The Bushmen live chiefly in the Kalahari Desert and in the western parts of South Africa.

The Hottentots are only a little larger than the Bushmen; and they have the same yellowish skins, high cheekbones, slant eyes, and flat noses. Their coarse hair is grown in patches over the head. They are a little more

Zulu.

intelligent than the Bushmen, and in times past they had vast herds of cattle and fat-tailed sheep. They then lived in tents or huts made of branches of trees covered with mats, dressing in sheepskins and smearing their bodies with grease. To-day they are largely servants and farm laborers; and are said to be about the laziest people under the sun. They are noted for their immorality and drunkenness, and are fast dying out.

42. RHODESIA — THE ZAMBEZI — THE NIAGARA OF AFRICA

WE have returned to Beira by sea and taken the railroad through Portuguese East Africa to Salisbury, the capital of the great province of Rhodesia. We are now in what might be called the frontier of British South Africa. The settlements by the whites began at the Cape of Good Hope, and they have been steadily pushed toward the north. Salisbury is more than four hundred

miles farther north of Cape Town than Duluth is north of New Orleans, and Rhodesia extends still many hundred miles northward. It reaches the Kongo Independent State and German East Africa, bordering on the southern shores of Lake Tanganyika, and lying on both sides of the Zambezi River.

Rhodesia is about one fourth as large as the United States proper; and a great part of it, being high and

Huge wagons, loaded with grain, . . ."

healthful, will support a vast white population. We see the homes of English settlers with sheep and cattle about them shortly after we enter the province. Huge wagons, loaded with grain, hauled by long teams of oxen, stand about the stations, and villages and towns are rapidly growing up along the line of the railroad.

Salisbury is a thriving little city with fine public buildings, good stores, and comfortable homes. It has churches, libraries, and schools. It has cricket clubs and football

grounds, and we notice that the children enjoy themselves quite as much as at home. We go about at night under electric lights, and ride from one place to another on street cars.

It is more lively still in Bulawayo (bo͞o-là-wä′yō), several hundred miles farther on, where we stay a few days before going northward to see the falls of the Zambezi River. The Zambezi is one of the largest rivers of Africa, being surpassed only by the Kongo, the Nile, and the Niger. It rises in the western highlands and flows eastward across the continent, emptying through a wide delta into the Indian Ocean. The lower part of the river and the Shire, its chief tributary, are navigable throughout their lower courses for small steamers, while, farther up the Zambezi, are long stretches of wide and deep water ways. In many places, however, the river is broken by rapids and waterfalls, and a short distance below, where the Quando flows into it near the western boundary of Rhodesia, are the Victoria Falls, which might be called the Niagara of Africa.

The Victoria Falls are in many ways more wonderful than Niagara. A short distance above them the Zambezi is over a mile wide. A little lower down it narrows and its whole volume drops into a great canyon several hundred feet deep, which runs at right angles to its course. The water falls a far greater distance than at Niagara. It makes a noise like thunder, and goes raging and tumbling on through a narrow gorge for thirty-five miles before it resumes its ordinary course.

The Cape to Cairo Railroad goes right to the falls, and there crosses the Zambezi on one of the highest bridges

Victoria Falls.

of the world, which has been constructed over the canyon below them. The falls will be used, as we are using Niagara, to furnish power for factories. Their force is so great that it is estimated to be equal to thirty-five million horses, all pulling at once. This is many more horses than we have in the whole United States.

We hear the falls some time before reaching them. The noise at first sounds like the roar of the ocean. It increases as we come nearer; and looking out of the car windows we can see great clouds of white mist rising in five columns, hundreds of feet into the air.

We leave the station and make our way up to where the river seems to lose itself in the earth. The spray is falling like rain, and our guides tell us that this rain continues day

and night, year in and year out. There are woods on the banks of the river, the leaves of which are always dripping, and the smoky mist above them makes one think of a forest on fire. Now the wind has sprung up, and the five geysers of mist have been blown into one great column which rises high over the forest. We are on the side of the river away from the sun. Its rays shine through the spray, and make glittering rainbows which sway to and fro with the wind.

We go by canoes to a little island above the falls, and afterward cross the Zambezi to get the view from the opposite bank. We then stroll along the canyon, watching the waters boiling and seething, now dashing spray high into the air, and now rolling about in whirlpools as they fight their battles with the rocks on their way to the sea. It is a wonderful sight, and well fitted to be compared to our own Niagara.

43. FARMING IN SOUTH AFRICA

RETURNING to Bulawayo we travel southward through Bechuanaland, the Transvaal, the Orange River Colony, and other states of South Africa, visiting the towns and spending some time on the farms. We stop at Palapye (pä-läp′yĕ), a native city of twenty thousand Kaffirs who have a large territory, with cattle, sheep, and goats; and from Mafeking (mä-fā-kĭng′) make an excursion into the Kalahari Desert, about the outskirts of which there are scattering tribes of Bushmen.

Most of our journey over this South African plateau is

through thirsty lands. There are but few streams, and nearly everywhere the soil is parched, brown, or bare. Now we pass through a region of stunted trees, and now where there is nothing but scraggy thorn bushes. The only green grass is along the borders of the few rivers, or where water can be got for irrigation. The grazing farms are large, as it takes much land for the stock, and the homes of the farmers are far apart.

This is so with most of South Africa, except in the mountains along the eastern coast, in Natal (nȧ-täl′), which is so green and beautiful that it is called the African Garden, and in Basutoland (bȧ-sōō′to-lănd) which adjoins it. There are also good lands in the Orange Free State and the Transvaal. Basutoland has the highest mountains on the continent south of the equator, some of its peaks being over two miles above the sea. It has wild ravines, wooded glens, and slopes covered with green pastures. Silvery waterfalls pour down its deep gorges, and it is so beautiful that it is called the Switzerland of South Africa. The country is also fine about Cape Town; but above it the land rises into the great Karroo, a plateau almost as wild and dry as the Kalahari Desert, and higher still, on another terrace, there are tracts bleak and bare.

Some of these lands make excellent farms. Wheat, barley, oats, and corn are grown in large quantities. In the Transvaal there are cotton plantations and extensive farms devoted to tobacco. Cape Colony is noted as a wine-growing region, and fruits from that colony and Natal are exported to Europe and the United States. The fruits here are ripe in January, February, and March, the

summer of southern Africa, so that they command high prices in the northern markets, as it is then our winter.

Stock farming is one of the chief industries of South Africa. Cattle thrive in most of the states, and the high, dry climate is especially fitted for sheep, goats, and ostriches. The farmers are either Englishmen or Boers,

Sheep farm.

the descendants of the Dutch settlers who came to South Africa long ago and took up farms about the Cape of Good Hope. When the English came, the Boers moved back into the Orange Free State and the Transvaal, and there built up a republic which lasted until the war between the British and the Boers, when that country came under the government of the British.

There were cattle and sheep here when the foreigners came, and the various Kaffir tribes still own stock. The Hottentots used oxen as pack and riding animals, and they even trained them as war oxen to charge the enemy. They had ox races, riding the animals without saddles, and direct-

ing them by a rope or strip of hide fastened like bridle reins to a small stick pierced through the nose of the ox.

The descendants of these native cattle are still to be found, although many finer breeds have been brought in from Europe. The native cattle retain their wild character, and become dangerous when excited or disturbed in any way. The cows will give down their milk only in the presence of the calf, and a calf is brought out at milking time.

Native cattle.

Sometimes, it is said, a stuffed calf is kept on hand to be shown to the cow. She smells it and thereupon lets down her milk.

We find large sheep farms in Cape Colony and also in the other states. South Africa vies with Australia and Argentina as one of the best sheep lands upon earth, and its wool commands high prices in our markets. Sheep

thrive in the rich pastures on the slopes of the mountains, and also upon the Karroo plateau, where the pasturage is so scanty that from three to twelve acres are required for one sheep.

The native sheep are brown, with heavy, flat tails made up of fat. Some such sheep are still owned by the natives, but the most common flocks are merinos and other fine breeds.

We visit several sheep farms. The sheep are kept in large fields, and strange to say a flock often has one or more goats in it, the goats serving as sheep dogs. They are trained to lead the flock from field to field, and are especially valuable when it is necessary to drive the sheep from one part of the country to the other. The goats will even lead them across the streams. They swim in front, and the sheep follow; after they have taken one flock across in this way, some of them are so trained that they will then turn around, swim back, and a little later bring across another flock.

Goat raising is now common throughout these colonies. Angora goats have been imported from Asia Minor and elsewhere. They are grown for their wool, known as mohair, which is used to make ladies' dress goods and other fine cloths. There are now more goats than cattle in South Africa. There are more than five million in Cape Colony alone, and the mohair shorn from them amounts to millions of pounds every year.

Many of the South African farms are far from the railroads. The wool and grain are brought to the trains in huge wagons, each drawn by a long team of oxen. Often twenty or thirty of these beasts will be yoked to one

wagon, which creaks and shrieks as it is dragged over the rough road. The oxen are usually driven by black-skinned Kaffirs, who form to a large extent the farm hands of this country.

We now and then stop to talk with the farmers. They tell us their troubles, and we find that they have quite as many as our farmers at home. In the frontier regions there are leopards, jackals, baboons, and lions which prey on the flocks; and some regions are infested by the terrible tsetse or poison fly, whose bite kills horses, oxen, sheep, and dogs. This fly is found in many parts of Africa, and it destroys thousands of animals every year. It looks very much like a small bee, save that its body is marked by yellow bands.

Another trouble of the South African farmer is the horse sickness, which attacks horses and mules; and still another, the rinderpest, which kills the cattle. In addition there are seasons of draught, when the crops are burned by the sun, and the cattle and sheep die of thirst and hunger; and at other times hailstorms, when hailstones, some as big as hens' eggs, destroy the grain and fruit and even kill fowls and goats.

As we ride over the country on the railroad we pass through a great cloud of locusts. There are so many that they darken the sky, and the trainmen tell us that they sometimes even stop the cars, their crushed bodies so greasing the rails that the wheels spin round and round without moving onward. The locusts come only occasionally, but in such swarms that they eat up everything green in their track. They ruin the crops, and the European settlers endeavor to poison and kill them in various ways.

44. A VISIT TO AN OSTRICH FARM

THERE is one kind of farming that thrives better in South Africa than anywhere else in the world. This is ostrich farming. Africa is the home of the ostrich. The great bird is found in a wild state on the edges of the Sahara and Kalahari Deserts, and also in Abyssinia and Somaliland (sō-mä′lē-lănd).

When the English first came, ostriches roamed in large numbers over the great Karroo and other dry parts of the South African plateau, and men hunted them. They chased them on horseback with dogs, and shot them whenever they could. The natives hunted the wild birds with bows and arrows, hiding in the sand about their nests, and shooting them when they came near. The chase has been so vigorously carried on that wild ostriches have almost disappeared. They are now seldom seen except in the wilder parts of the continent.

Most of the ostrich feathers of commerce come from tame ostriches, which are reared upon farms. In gathering the wild feathers, the ostrich is killed by the hunters, and each bird furnishes but one crop of plumes. The feathers of the tame ostrich are plucked every seven or eight months, so that one bird gives many crops.

Until within the last century it was not known that ostriches could be domesticated. Then an English farmer near Cape Town caught some little ones and tamed them. He kept them in fields with fences so high that they could not jump over, and fed them, plucking the feathers twice every year. The ostriches grew, they

dug out nests in the sand, and laid eggs and hatched them.

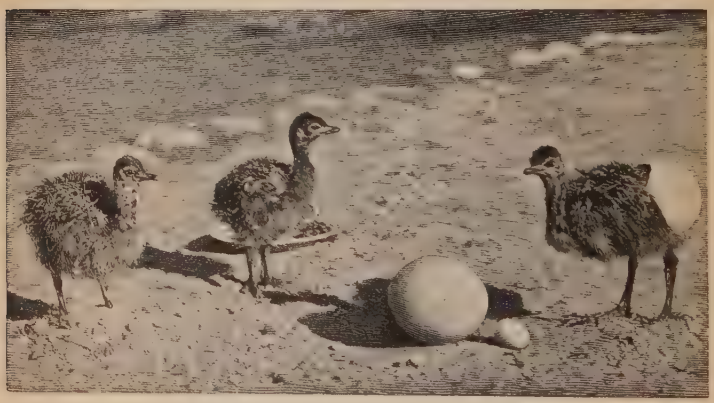
They thrived so well that the business became profitable. Then other farms were started, and the habits of the birds were studied in order to learn the best ways of feeding and caring for them. Later the great eggs were hatched in incubators, as well as by the ostriches themselves; and now ostrich farming has become one of the most important industries of South Africa. Hundreds of thousands of birds are reared on the farms, and the feathers sold bring in a large sum every year.

But suppose we visit an ostrich farm situated on these high, sandy plains which were once the home of the wild ostrich. We drive from the railroad across the country, which is covered with gray, stunted bushes and a scanty growth of brown grass. The farmer's home is a square, brick building surrounded by green grass and shaded by trees. He has a spring near his house, and parts of the farm are well watered. The farm contains about fifteen thousand acres. It is divided into large fields by high wire fences, and upon it there are now more than one thousand ostriches of all ages and sizes.

We see some ostriches on our way to the house. What huge birds they are and how odd! They are sometimes called giraffe birds or camel birds, from their long necks and oddly-shaped bodies. Those in the field are taller than the tallest man. See! Some of them have put their heads over the high wire fence as though they would peck at us as we go by. Notice how small their heads are and how big the eyes! They snap their long, wide, flat bills,

and the noise sounds like a pistol. Their snakelike necks are covered with fuzzy feathers, their great legs are bare, and on their bodies are beautiful plumes. Some of the ostriches are gray and some glossy black. The gray ostriches are the smaller, they are the hens; the black ones are the cocks.

Now we have left our carriages and are approaching the fence. The ostriches start off on a trot. They can not fly, but can run as fast as a horse. See how they spread out their wings; they seem to swim on the air as they race over the field.



"They are covered with down, . . ."

Our ostrich farmer is an Englishman. He is glad to have visitors at his lonely home on the plain. He asks us to rest awhile, and then takes us over the farm. The fields nearest the house are devoted to the ostrich chicks and to rearing young birds. Here is one in which two-score baby ostriches are feeding. What odd-looking creatures! They are covered with down, like little

chickens just hatched; their bodies are as big as a full-grown Plymouth Rock hen, and they seem all eyes, legs, and neck. Their eyes are as large as those of a baby. The chicks are gathered about an old Hottentot who is feeding them grass and the fine gravel with which they fill their little gizzards to grind up their food. He gives them also wheat and water and broken-up bones. These birds were hatched in the incubator only a few days ago, and their Hottentot nurse must watch them carefully to keep them from catching cold, bringing them back to their warm brooding place in the evening. He treats the chicks as though they were his children, and they follow him wherever he goes.

In the next field are two old birds and about twenty young ones. They are watched over by a Kaffir, who has been with them every day since the young birds were hatched. This is to keep them tame and accustomed to man, and also to see that the jackals, lynxes, and other wild animals do not destroy them at night. Ostriches have many enemies, and, in these large inclosures, some of which contain hundreds of acres, it is hard to protect them.

Going onward, we stroll over one great range or field after another. There are flocks of full-grown ostriches in many of them, and we are warned to be careful. The male is fierce when the hen is laying her eggs or hatching, and will attack any one who comes near the nest. The farmer gives each of us a bush with long thorns upon it, and tells us to thrust this at the head of any bird that runs at us. The ostrich is afraid of hurting its eyes, and keeps away from the thorns.

The cock ostrich is dangerous when enraged. It is not afraid; it will run at its enemy as fast as a horse can gallop, and jump at him and kick him. The ostrich can give a terrible blow. It kicks forward and downward; the kick loses its force as the foot nears the ground. For this reason an ostrich can not well strike a man lying down; and the keepers, when a mad ostrich attacks them and they have no means of defense, sometimes throw themselves flat on the sand. The bird will then kneel on them and bite them; but he can not do so much injury as when they were standing.

We are attacked as we pass through one of the fields. A cock ostrich rushes at us, but the farmer keeps him off with his thorn bush, and finally shows us the nest upon which his mate, a big hen ostrich, is sitting. She has seventeen eggs under her in a hole as big as a wash-tub, which the cock has dug out of the sand. She runs off as we come up, and the cock and she now stand about and cry as we handle the eggs, which they are afraid we may break.

The eggs are almost as large as our heads. Each weighs about three pounds, and contains as much matter as eighteen hen's eggs. They are white with black specks on them. Ostrich eggs are good eating when fresh. A single one will make an omelette for a large family; the omelette tastes just like one made of hens' eggs.

The hen ostrich lays about twenty eggs before sitting, and sometimes as many as thirty or forty. The cock and hen work in partnership in fixing the nest and hatching the eggs. The hen selects the place for the nest, and the cock digs the hole. He sits down in the sand, and by

picking and pawing and twisting himself about makes a wide, deep place for the eggs. When the sitting begins, both birds take daily turns, the cock usually sitting by night and the hen by day. They keep this up for about six weeks, which is just twice as long as is required to hatch chicken eggs. The cock spends the longest time on the nest, and he sometimes drives the hen back to her duty if she leaves the eggs when she should not.

The cock ostrich is a good husband and father. He is anxious about his children, and he sometimes breaks the shells for them when he hears them trying to peck their way out. The shell of an ostrich egg is about as thick as the pasteboard cover of a school book, and we can see that it is hard for the baby chicks to peck their way through. So when the father hears them tap, tap, tap, he squeezes the egg between his breastbone and the sand until it breaks; he then tears the inside skin with his bill and lets the baby out. A few hours afterward the little one is toddling around on its long legs, and a day or so later it is eating all it can get.

A baby ostrich grows fast. When it is a month old it is as large as a turkey, and at eight or nine months its feathers are ready for their first picking. They are then of little value, but they grow better and better, and are picked regularly every seven months until the bird is full grown; this is at three or four years, after which it may produce more than one hundred dollars' worth of feathers a year. An ostrich often reaches the age of seventy or eighty years.

Our farmer asks us to go with him to a field where they are plucking some birds. One hundred fine ostriches

have been driven in by Kaffirs on horseback, and are now inclosed in a small field which has some little pens at one end. Each pen is just large enough to hold one ostrich and his pluckers; but so small that the ostrich has not room to kick while in it. The Kaffirs drive the birds into the pens, using thorn bushes to guide them.

Young ostriches.

As soon as a bird is inside, the bars are put up, and a cloth like a stocking is drawn over its head. While thus blindfolded it keeps quiet. The wings are now raised, and the long, beautiful ostrich plumes, which grow there, are cut off close to the skin. There are twenty-five of these in each wing; they are beautifully white on the male birds, and white, tipped with gray or yellow, on the

females. The shorter feathers, which make ostrich tips, are now clipped and then the tail feathers, of which sixty or more are most valuable. In all about three hundred feathers and tips are taken from one bird, and these will all grow again in a space of seven months. The best feathers come from the male birds.

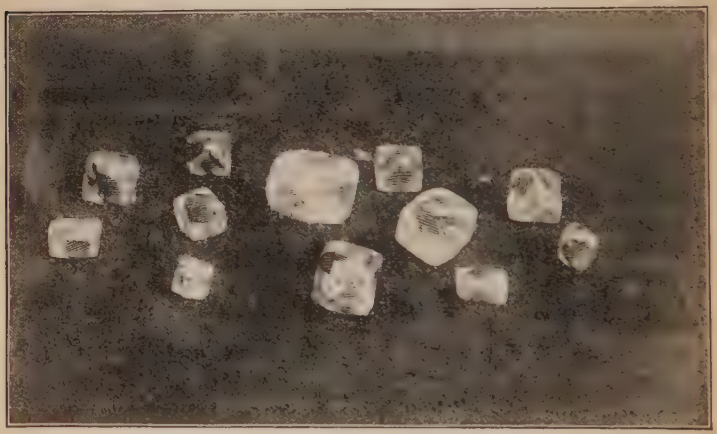
After plucking, the feathers are sorted and graded. They are tied up in bundles and sent to the ports for shipment to Europe. There they are cleaned and dyed, the white plumes only being left as they come from the bird. Most of the feathers go first to London; from where they find their way to the hats and bonnets of the ladies of the civilized world.

45. KIMBERLEY AND THE DIAMOND MINES

WE begin our travels this morning in the heart of the richest diamond field of the world. We are in Kimberley on the high plateau of South Africa, almost seven hundred miles north of Cape Town and five hundred miles from the east coast, in the middle of a vast, sandy plain, with no trees except those in the city itself. The land is almost a desert, with scarcely a hill in sight to break the view. It has no water nearer than the Vaal (väl) River, which is seventeen miles away, and, when the wind is high, the sand blows through the streets, penetrating every crack and crevice of the houses.

To look at the country one would not suppose it worth anything, and the stranger might ask how this thriving city, with its electric lights, fine shops, hotels, and daily

newspapers, came to exist. He might wonder at the well-dressed crowds on the streets and at the business which goes on everywhere. He would soon learn that Kimberley is one of the richest towns upon earth. The land about it produces more wealth than almost any other of the same area; and this wealth comes from the diamonds found in the ground. More than ninety-five per cent of all the



Rough diamonds.

diamonds now produced come from this region, and larger, purer, and finer stones are found here than anywhere else. Within about forty years more than fifteen tons of diamonds have been taken out of this part of South Africa. A ton makes quite a load for two horses, and if you will imagine as many diamonds as thirty horses all pulling at once could haul, you may have some idea of the enormous quantity of the jewels comprised in the fifteen tons.

It takes only a small diamond to be worth one hundred dollars, and, as you may imagine, this product is worth

many, many millions. As much as twenty-five million dollars' worth of diamonds are now taken out of Kimberley in one year, and thousands of men are working getting the precious stones out of the earth.

In ancient times India supplied the chief diamonds of the world. Then some were found in Brazil not far from Bahia, and thousands of diamond seekers rushed to that place. No one then supposed that there were diamonds in South Africa, and it was not until 1867 that a man named John O'Reilly made the first diamond discovery. O'Reilly was hunting near the Vaal River when he stopped to rest one night on the farm of Schalk van Niekerk, a Dutchman, who lived there, away off in the wilderness. As the hunter chatted with his host he saw some beautiful pebbles from the banks of the Vaal River lying on the table. He admired them, and his host told him to take them along if he liked. He did so and among them found one that would cut glass. He showed it to a jeweler, who told him it was a diamond, and that it was worth twenty-five hundred dollars.

As soon as this became known, both Europeans and natives began to search that region for diamonds; but it was about two years before another large stone was discovered. This was found by a Hottentot, who traded it to Schalk van Niekerk for a little drove of cattle and some sheep worth about two thousand dollars. Van Niekerk sold the stone to the diamond merchants for fifty thousand dollars, and they sent it to England, where, after cutting, it was bought by the Countess of Dudley for more than twice that amount. It proved to be a pure white diamond, weighing about three and one half ounces.

At the news of this great find, many men came and camped along the banks of the Vaal and Orange rivers, digging up the gravel and searching for diamonds. They found none to speak of along the Orange River, but some here and there along the Vaal, and they gradually pushed out, searching the land until they came to where we are now. Here more of the precious stones were discovered than anywhere else, and they dug up the ground and washed it to see if some might not lie beneath.

After a short time they found several places near Kimberley where there were quantities of diamonds mixed with the earth, running down no one knows how far under the ground. At the surface were a few feet of red sand, and under that a somewhat thicker deposit of limestone. Below the limestone lay the hard clay containing the diamonds. The clay is blue in color and the diamondiferous earth is called blue ground. It is composed of fragments of many kinds of rock and among them the diamonds, the whole cemented, as it were, into one solid mass of clay. The blue ground extends downward in the shape of great pipes or funnels. When taken out and dried in the sun, being wet with water from time to time, it crumbles to pieces, so that the rocks and clay can be washed away and the diamonds picked out.

At first mines were sunk everywhere throughout the diamond territory to learn where the best deposits were, and from them it was ascertained that there were four principal fields all lying about Kimberley in a circle not more than three and one half miles in diameter. These mines are the Kimberley, the De Beers, the Dutoitspan, and the Bulfontein.

At the beginning, the mines were worked from above, like a stone quarry or gravel pit, the blue ground being carried to the surface in baskets over cables of wire. Then great shafts or pits were sunk along one side of the blue ground deposit, and tunnels were made from the shafts by which the blue rock was brought out and carried to the surface by machinery operated by steam. All the mining is now on a grand scale; and the best of the diamond territory has been bought by one company, known as the De Beers Company, which has a capital of twenty million dollars, and practically controls the diamond product of South Africa.

In a diamond mine.

We have letters of introduction to the managers of this company, and through them are furnished a guide who takes us down into the works and shows us how diamonds are mined. We go to the shaft and step into the elevator. The guide gives a signal and we sink down, down into the darkness. Now we pass a tunnel, where half-naked Kaffirs are blasting out the rock and loading it upon trucks, which they shove over tramways to the shaft, only to drop again into the darkness and descend until at last we stop more than a thousand feet underground.

We walk off through a tunnel, following the car track to where the miners are working. They are black-skinned natives wearing little more than a cloth about the waist. Some have picks and are digging down the blue rock, others are lifting the great lumps into cars, and others are wheeling the trucks to the shafts. It is hot, and drops of sweat stand out on their black skins as they work.

The mine is lighted by electricity, and we can see everything as plainly as though it were day. Our guide shows us the rock, and we take some up in our hands. It feels like soap, and we look in vain for diamonds in it.

After a while we go with the cars up the elevator, and follow them from the top of the shaft to the drying fields, where men are spreading the blue rock over the ground. The whole looks like a freshly plowed field of blue earth. The great clods are as hard as sandstone, and it requires months of weathering before they are ready for washing. From time to time water is sprinkled over them, and now and then the field is harrowed. These processes make the rock soft; it begins to crumble, and is then ready for washing.

The blue stuff is now taken up and put into cylinders and pans, and whirled round and round. Water is admitted from time to time. The blue clay melts and flows off in a mud, and after a while only the gravel containing the diamonds is left.

This is now carried to a sorting room, a long, narrow building with a table running through it. It is spread out upon the table, and men look it carefully over and pick out the diamonds. They are skillful, and can tell a precious stone as soon as they see it. A rough diamond looks much

like a white stone, and shows nothing of the brilliancy which it will have when cut and polished.

The rough diamonds are next taken to the company's office, where they are cleaned with acids and carefully classified with reference to color, size, and purity. They are then made up into parcels and valued, and are sold to

Sorting room.

local buyers who represent the chief diamond dealers of the world. These men ship them to Europe and the United States, where they are cut and polished and made into jewelry. The chief diamond polishers of the world are in Amsterdam; we have already visited them during our travels in Europe, in another book of this series.

South African diamonds are of a great variety of colors. The most valuable are pure white, but others are green, blue, pink, brown, yellow, and orange. The size, purity,

and color determine the value. In March, 1888, a yellow diamond was found in the De Beers mine which weighed four hundred and twenty-eight carats in the rough, and two hundred and twenty-eight carats when it was cut; but this has been surpassed by a diamond weighing nine hundred and seventy carats, which was discovered in the Orange Free State about six years later. A still larger one, weighing over three thousand carats, was found in 1905.

One of the largest diamonds ever found.

As we walk through the mine we ask our guide if diamonds are not often stolen. He replies that this is sometimes the case, although every precaution is used to prevent it. The natives who are employed must each engage to stay in the mines for three months. They live, while not at work, in compounds or great open squares connected with the mines. Each square is lined with the iron sheds where the men sleep, and is surrounded by a close, high, iron fence. It has a roof of fine wire netting to prevent any one throwing the diamonds which he may have stolen to his friends

outside. The men are carefully watched while at work to see that they do not either swallow the diamonds or conceal them about their persons; and they are often searched to find whether they have not hidden a stone under their armpits, between the toes, or even in sores made for the purpose in their bodies. Each man is given a new suit of clothes when he enters the mine, and he is stripped and carefully examined before he leaves. In addition to this, the law has severe penalties for buying diamonds of natives, or others who can not show just how they got them.

46. THE GOLD MINES OF SOUTH AFRICA — JOHANNESBURG

AFRICA was known as a land of gold before the Cape of Good Hope was discovered. The caravans brought the precious metal from the Sudan down to Egypt, and fabulous stories were told of rich gold mines far up the Nile. When Vasco da Gama was returning from his first voyage to India, he stopped at Sofala Bay not far below Beira, and found there a colony of Arabs who were trading with the natives for gold. This gold had already been an article of commerce for many years. It had come from far in the interior, where are still the remains of ancient mines. Some think the gold used in Solomon's Temple may have been dug from those mines.

Later on, gold, chiefly in the form of dust, was discovered along the Gulf of Guinea in such quantities that that region became known as the Gold Coast. The English coins, into which it was made, were called guineas because they were

composed of this Guinea gold. They were first made in the time of Charles II. The guinea contained twenty-one shillings, or a little more than five dollars' worth of gold. It is not used now, although it forms one of the units of money calculations in Great Britain.

The chief gold mines of Africa were not discovered until within the past half century. Then a German explorer who had traveled over this great southern plateau from the Limpopo to the Vaal returned to Berlin and said that it was full of gold from river to river. His story was disbelieved, and he died before he could take people back to South Africa to prove it. About 1884, however, the existence of gold became known, and a little later it was found that here lay some of the richest gold deposits of the world. They are on the highlands between the Limpopo and the Vaal rivers, several hundred miles west of the Indian Ocean, and about one thousand miles north of the Cape of Good Hope. They lie in the Transvaal on the very roof of South Africa, the district being known as the Witwatersrand (vĭt-vä'tẽrs-rânt), a Dutch word meaning "white water ridge." This ridge rises about three hundred feet above the surrounding country, running for more than one hundred miles east and west. Throughout its whole distance gold has been found, and hundreds of millions of dollars' worth of it have been taken out of the ground. During certain years gold to the value of eighty million dollars has been mined, a sum equal to more than one fourth of all the gold produced by the world in those years.

We reach the gold regions by taking a train from Kimberley to Johannesburg (yō-hän'nĕs-bŭrg). The trip is a

tiresome one. We are more than a day on the cars, riding over this bleak, dusty plateau. Now we pass a little village, and now the home of a farmer surrounded by trees. We see herds of cattle and numerous flocks of sheep and goats. At one time we ride by an ostrich farm, and several of the huge birds spread out their wings and fairly swim upon the air as they race with the train. There are long

In a gold mine.

teams of ox wagons at the stations, and now and then a group of dark-skinned natives stand and stare as the cars go whizzing by. The air is wonderfully clear, and we can see ranges of blue hills here and there in the distance.

We cross the Orange River Colony and enter the Transvaal, and after a few hours find ourselves coming into Johannesburg, The Golden City, in the very heart of the gold region. The smokestacks of the mines are visible long before we get to the city, and they extend for miles away on either side. The great buildings near them con-

tain mining machinery and smelting works, and the piles of refuse are the waste from which the gold has been taken. There are cabs at the station, and we ride in comfort through wide and well-paved streets to the hotel.

Smelting works.

We are now in one of the busiest cities of Africa. Johannesburg is larger than any other town we have seen since we left Cairo, and more like one of our cities at home. It has beautiful houses, big stores, and fine public buildings. It has daily newspapers, a free library, and public schools. There are street cars going in every direction; also cabs of all kinds, and even jinrikshas. We ride out to the parks, and in the pleasure grounds of the Wanderers' Club watch a cricket match, and see boys and girls riding bicycles on tracks made for the purpose.

We walk out of our hotel into Commissioner Street, shopping at stores as fine as those of our great cities, and later stroll on down to the market square in the center of the

city. It is a great space filled with ox wagons loaded with hay, grain, and other products which have been brought in from the country about. The Transvaal and Orange River colonies have good grazing lands, and the farmers travel many miles to sell their crops in this square. Some of the wagons are owned by Dutch, others by English

Commissioner Street.

men, and a few are driven by black-skinned natives who are usually servants.

We watch the buying for a few moments and then enter the market buildings, in the center of the square, to see the retail buying and selling. Next we stroll on to the Post Office and thence to the Stock Exchange, being jostled on our way by one of the strangest crowds of this strange continent.

Johannesburg has people from all parts of Europe who have come here to mine or do business. There are also thousands of Kaffirs and other natives, who work in the gold mines, and many Hindoos and Arabs and even Chinese. The yellow-skinned, the black-skinned, and the brown-skinned races jostle the whites on the streets — all are gathered here by their desire for a share of the precious metal which lies under the ground.

At the Stock Exchange we learn that most of the mines belong to the British. They are owned by companies of rich men of London and elsewhere who operate them with large capital, using the finest of modern mining machinery. We meet the managers of some of the mines, and have little difficulty in learning how the gold lies in the earth and the methods of taking it out and making it into gold bricks for shipment to Europe.

The gold of the Transvaal lies in veins or strata which run a long distance down into the earth. It is mostly in crystals or flakes so small that they can not be seen with the naked eye. It is mixed with a vast amount of quartz pebbles which are cemented together with sand and other rocks, so that the pebbles look much like raisins in a plum pudding. The gold is not found in the pebbles, but in the other part of the pudding. The whole is very hard and it has to be taken up and pounded to powder before the gold can be obtained.

The mining is done by sinking a shaft, or great pit, down through the veins and running off tunnels into it so that the precious rock can be broken down and brought to the surface. There, it is put into stamping mills and crushed to powder.

After this it is washed with water through a wire screen, the meshes of which are very small, and then flowed over copper plates coated with mercury. Gold has such an affinity for mercury that after a time the mercury contains a large amount of gold. The mercury is then run off into a pot and placed in a furnace which is so hot that the mercury passes off in a vapor, leaving the gold.

This process takes out most of the gold, but not all. That which still remains in the dust is extracted by means of the cyanide or chlorination methods. By the chlorination process the ores are first roasted, and then chemically treated to get out the gold. By the cyanide process they are mixed in a solution of cyanide of potassium and water, for which the gold has such an affinity that it leaves the rock and is taken up by the solution as water takes up salt. The cyanide water, containing the gold, is then flowed over zinc shavings, which the gold likes better than the cyanide. It leaves the solution and sticks to the zinc, which is then so treated that only the gold remains.

During our stay we go down into a mine. It is several thousand feet deep, and in the lower tunnels so hot that we are glad to get out. The mine is lighted by electricity; the ore, when blasted down, is loaded on cars and pushed over a railroad track to the shafts, whence a steam engine elevates it to the top. Much of the rough work is done by Kaffirs, superintended by white men. From the mine we go to the smelting works, and finally into the offices of the superintendent, where in a great safe he shows us bricks of pure gold so large that we can not lift more than one at a time.

47. NATAL, THE GARDEN OF SOUTH AFRICA

TO-DAY we leave the high, dry plateau and make our way by railroad down to the Indian Ocean through Natal, the Garden of South Africa. This country was one of the first discovered by the Portuguese. When Vasco da Gama in 1497 came around the Cape of Good Hope, he made a short voyage up the east coast, and on Christmas Day, the natal day or birthday of our Savior, entered the beautiful bay on which Durban (dûr-băn′), the chief city of Natal, stands. He called the place Port Natal in honor of this discovery, and this has been adopted as the name of the colony about it. Port Natal is the best harbor on the eastern coast of the continent, and almost one thousand vessels call there every year. Railroads have been built from Durban to the high plateau, and goods for Johannesburg and the towns north of it are brought there and sent over these roads.

We take the train at Johannesburg for Durban. The cars are comfortable, and we could if we wished make the journey of four hundred and eighty miles in one day. The first part of our trip is over the high, dry, brown plateau, upon which cattle, sheep, and goats are everywhere feeding.

We cross the Vaal River, and a little later are in the Drakensberg Mountains. We go down to the coast over a succession of terraces beautifully green. We pass by ravines carpeted with maiden-hair ferns, riding now

through wooded hills and again over rolling meadows where fat cattle are feeding. There are many fine farms with comfortable homes. Some are fenced with green hedges, and there are frequent groves with trees from one hundred to one hundred and fifty feet high.

". . . great beds of pineapples.

The crops change from time to time as we pass from the plateau down to the sea. On the highlands there are fields of barley, oats, and maize, and fine cattle and sheep. Farther down are orchards of peaches and apples, and lower still tea and coffee plantations. Along the coast the climate has a tropical character, and there are fields of rice, sugar cane, and tobacco, together with lemon and orange groves, mango trees, and great beds of pineapples.

Natal can grow almost any fruit known to man, and it exports oranges and pineapples to the other colonies about. It is so rich that we wish we could tarry to enjoy the green fields and the beautiful fruits.

We stop at one of the stations in the lower part of the colony to visit a tea plantation. Tea leaves are not unlike those of a rose bush, and the bushes are much like our box-wood. The plants are grown from the seed, and are set out during the wet weather at the beginning of September, the South African spring, or at the end of March in the autumn. They are planted in rows about five feet apart and carefully cultivated. When they are three or four years old the leaves are first plucked, and after that from time to time during the summer.

Our plantation belongs to an Englishman, and we have no trouble in learning how tea is raised. The rough work is done by natives. We see Kaffir men digging up the rich soil and cultivating the plants, and Kaffir women and boys leaning over the dark green bushes picking the tea into baskets which they carry to the factory on their heads. A girl can pick about thirty pounds of leaves in a day.

We follow some of the tea pickers to the factory and see them spread the green leaves out upon the drying floors. Here they are left until they become withered. They are now as soft as silk, and can be rolled into the shape of the tea leaves of our stores. This is done by machinery. The leaves are then dried and packed up in lead-lined boxes for shipment to all parts of the world. Natal has now thousands of acres of tea plantations, the product of which amounts to several million pounds of tea every year.

Going on with our journey, we visit dairy farms, tobacco fields, sugar estates, and pineapple plantations, finding the white people everywhere prosperous. They own the best lands, and the natives are working for them. This is so common throughout South Africa that it is said the whites form the brains and the blacks the muscle of the country.

The natives here, as in most parts of South Africa, are Bantus. They are Kaffirs or Zulus, who formerly lived in villages scattered over the country, owning cattle and sheep. There are still Kaffir farms, and also reservations — lands which the Natal government has set aside for the natives, as we have set aside lands for our Indians. These Kaffirs live in low, round, beehive-shaped huts, made of poles thatched with straw over which is tied a network of ropes. Such a hut is often surrounded by a fence or hedge, inside which the cattle are kept at night. Some Kaffir villages have such stockades inclosing all the houses, and sometimes a field will be fenced in, outside the village, for the stock.

The interiors of these native huts are of the rudest description. The floor is the ground, and there is little or no furniture except a few pots or kettles, the cooking being done over the coals.

We stop off a day on our way to the coast, at Pietermaritzburg (pē-tẽr-mâr′ĭts-bŭrg), the capital of Natal. It is situated in the hills about seventy miles above Durban, and is noted for its delightful surroundings. The climate is excellent; there is plenty of rain, and the grass is green all the year round. The houses are built of bright red brick made of a clay near by, and many of them have beautiful gardens. We call upon the governor and visit the legis-

lative council building, where the laws for the colony are made. We find English people everywhere, and are told that most of the whites come from England and Scotland, the Dutch being few.

Again taking the train, two hours brings us to Durban on the Indian Ocean, hundreds of miles below Lourenço Marquez and more than eight hundred miles from the Cape of Good Hope. As we come out of the station, we see all sorts of vehicles ready to take us to different parts of the city. There are cabs and carriages with East Indian, Malay, or native African drivers; there are street cars moved by electricity, and jinrikshas with men in the shafts. We each choose a jinriksha at two shillings an hour, and are soon trotting through the streets behind some of the queerest steeds of the world. The jinriksha men are Zulus, wearing white cotton tunics trimmed with red calico, and white trousers, cut off at the knees. Every man has his head dressed his own way. Some have cow horns fastened to the skull

"... a jinriksha at two shillings an hour, ..."

and the hair wrapped around them; others have strings tied to their wool to which fluffy balls are attached; and others have the hair combed so that it stands out like mops on their heads. They are good-humored fellows, and we go like the wind as they take us from one part of the city to another.

We first visit the wharves, where there are great ships from England, Germany, and other parts of Europe loading coal brought from the mines of northern Natal. The coal is carried into the ships in baskets by Zulus, a long line of men marching up and down for hours at a time.

Policeman.

We then go back to the city and spend some time riding through its wide streets. Zulus are employed as policemen, and good order is everywhere kept. Our jinriksha men take us to the schools, the parks, and the botanical garden, ending the journey at the public bathhouse near the Town Hall. Here we go in for a swim. The tank is ninety feet long, thirty feet wide, and three feet deep at one end and eight feet deep at the other.

After our bath we take a street-car ride through the town, and then shop in the stores. Many of the smaller

establishments are kept by East Indian merchants, who wear great turbans of various colors. They have a large part of the trade of the natives; they are also peddlers, carrying goods about from place to place.

48. CAPE COLONY

WE go from Durban to Cape Town by sea. Our steamer is one of the great ocean liners which ply between South Africa and England. It brought out passengers and manufactured goods of all sorts, and is now starting homeward with wool, hides, coffee, and fruit. We take on grain and wool at East London, farther south on the coast at the mouth of the Buffalo River; and also stay several hours at Port Elizabeth, on Algoa (ăl-gō′ȧ) Bay, to load sheep and goats' wool, grain, and ostrich feathers.

Port Elizabeth is the second city of Cape Colony and has such a large export trade that it is sometimes called the Liverpool of South Africa. The land along the coast is sandy, and the town looks bleak and bare as we approach it by sea. The houses rise in terraces from the beach to the tableland above, where the best residences are. We land by means of a tug and take a street-car ride through the city, visiting the feather, wool, and fruit markets on market square.

The distance from Port Elizabeth to Cape Town is more than four hundred miles, and we are about two nights and a day making the voyage. Some hours before reaching the Cape of Good Hope we steam by Cape Agulhas (ȧ-goo̅l′yȧs), the southernmost point of the African conti-

nent. Agulhas means "needles," and the name comes from the saw-edged reefs and needlelike rocks which lie here and are very dangerous to vessels hugging the coast. The worst of them are just off Danger Point, where a lighthouse now stands. It was here that the steamer *Birkenhead* went down many years ago; the ship was broken on the rock, and between the surf and the sharks three hundred and fifty-seven persons perished.

Cape Town.

In going by, we keep far out from Cape Agulhas and also well away from the Cape of Good Hope farther on, finding the latter less windy than Bartholomew Dias did when he discovered it in 1486 and named it the Cape of Storms.

We sail more to the northward, rounding the Cape, and enter Table Bay, coming to anchor at the wharves of Cape Town. We are now in the chief commercial city of South Africa and in one of the great ports of the world. Huge ocean steamers from Europe, North America, South America, Asia, and Australia are lying at the docks, and

the scenes of loading and unloading cargo are busier than in any other African port we have visited. There are great docks all about us, and enormous breakwaters have been built out to protect the shipping. The railroad cars come right to the steamers, so that goods can be carried from here to the chief ports of South Africa. The imports and exports of Cape Town amount at times to more than two hundred million dollars a year.

We land and take carriages for a drive through the city. How beautiful it is and how strange! It is built about the shores of Table Bay, rising up the steep slope of Table Mountain which lies behind. That peak to the left is Devil's Peak, more than three thousand feet high, and the mountain at the right is the Lion's Head, which is about two thousand feet above where we now stand. Table Mountain itself is a thousand feet higher than Devil's Peak. It rises behind the town in a sheer precipice, cutting the sky line with a jagged front two miles in length. As it stands there it looks like an enormous table. There are often white clouds above it which at times spread out and hang down over the top, looking for all the world like a great tablecloth.

We find Cape Town well built. It has large stores of brick and stucco, some beautiful residences, and fine public buildings. A belt of gardens incloses the city, and there are botanical gardens in the center filled with tropical plants and fruits. The streets are well paved, and there are excellent roads leading out into the country. Many of the houses in the suburbs are of one story, but nearly all have gardens and yards about them, and they seem quite as comfortable as our homes in America.

"We find Cape Town well built."

Most of the people are white; but we meet many natives as we go through the streets, and also Malays in turbans and lithe Hindoos in the dress of East India. There are English soldiers from the garrisons near by, queerly dressed sailors from all parts of the world, and strangers from everywhere who are passing through this gate of the African continent.

Cape Town has excellent hotels, and we spend several weeks making excursions by rail to the different parts of the province. Cape Colony is one of the most important of the British possessions in Africa. It is of vast extent, being larger than Texas and Massachusetts combined, and it has such an excellent climate that white men can live in it quite as well as in Europe.

A century ago the country was wild and almost unknown. It abounded in game and was inhabited chiefly by savages who fought with one another. To-day Cape Colony has great farms and stock ranches, and also vineyards and orchards. It produces a vast quantity of fruit and makes wine for export to Europe. It has more than a million cattle, more than a million sheep, about five million goats, and two hundred and fifty thousand ostriches. The colony has several thousand miles of railroad, there are good roads almost everywhere, and the telegraph lines are so many that if the wire were stretched out, it would reach around the globe.

Cape Colony has good educational facilities. It has excellent schools; there are universities in Cape Town, and more than one hundred public libraries in the different towns. We have the daily newspapers at our breakfast tables, and in them read telegraphic dispatches from the United States.

During our stay in Cape Town we call upon the governor and then visit the parliament house, a fine granite structure in a beautiful garden. Cape Colony, like Natal, has a governor appointed by the king of Great Britain and a parliament or congress elected by its people. The parliament makes the laws, so that the colony really governs itself.

In our travels through the different states of South Africa we have met many Boers. The most of them are farmers scattered throughout Cape Colony, the Transvaal, and Orange River Colony. They are the descendants of Dutchmen who came from Holland many years ago to live in South Africa. The country, as we know, was first discovered by the Portuguese; but the Dutch, who are great

traders, followed fast on their heels and soon had ships going about the Cape of Good Hope to India. Many of these ships stopped at Table Bay and brought back news to Holland that the land was fertile and fitted for stock and grain raising. In 1652 some Dutchmen came out and formed the first settlement near Table Bay. Others fol-

Parliament house.

lowed, and the country was declared a possession of Holland. It remained so until 1795, when the English, being at war with the Dutch, captured it. Upon the declaration of peace the English restored the country to the Dutch; but, in another war which soon followed, they again took possession of it and this time for good, although they paid the Dutch several million dollars for it.

The Dutch farmers did not like the British government, so they moved farther back into the interior. They had huge wagons with long teams of oxen with which they could make but a few miles a day. As the English came northward, the Boers pushed on and on, taking up farms here and there, until they had established themselves in many places in the upper part of Cape Colony and also in the Orange River Colony and in the Transvaal.

They had possession of the two latter colonies at the time gold and diamonds were discovered, and they kept them until their war with the British. At that time the Boers fought bravely for more than two years; but they were finally conquered, and in 1902 their colonies came into the hands of the British.

49. GERMAN SOUTHWEST AFRICA

WE have now completed our exploration of the African continent with the exception of two unimportant colonies in the southwestern part, at the ports of which we shall call on our way home. The first is German Southwest Africa, which lies west of Cape Colony and Rhodesia, extending from them to the Atlantic Ocean; and the other is Angola or Portuguese West Africa, which is immediately north of this German possession reaching to the Kongo Independent State. The territories of both colonies are large, and the climate, in most parts, is so unhealthful that neither has been thoroughly explored.

We go by steamer from Cape Town to Angra Pequena

ăn′grà pā-kān′yà) Bay, in the southern part of German Southwest Africa, and thence sail northward to Walfish Bay, where the English own a landing place, and on a few miles farther to Swakopmund (swä′kŏp-mo͝ont), the chief German port of the colony.

Our journey along the coast gives us some idea of the country. A great part of it is desert. It has no rivers worth mentioning except those of its boundaries, the Orange on the south and the Kunene (ko͝o-nā′nĕ) and Zambezi on the north. The other streams flow only during the wet season, and then but for a short time when the torrential rains fill their beds so that they overflow the banks and cover the land for miles about like a sea. A short time after the storm has passed the flood disappears, and the river beds are dry again.

Along the coast the land is almost altogether desert, the chief plants being dry acacia bushes and starved heather, which are to be seen here and there in the hot sand. Back of this coastal strip there is a mountain range, separating the high plateau of the interior from the sea.

The mountains are also bleak and bare, and this is so of the southern portion of the colony. It is only in the northern and western parts of the plateau that there is enough water to support much animal life. In those regions there are wide, grassy plains, upon which feed antelopes, zebras, and herds of cattle; there are also thin groves where leopards, jackals, and lions live with an occasional herd of buffaloes or elephants.

The northern part has most of the natives. It is called Damaraland (dà-mä′rä-lănd), and its people are sometimes called Damaras. They are chiefly Bantus with brown skins

and black hair, and are not unlike the Kaffirs in appearance. Many tribes have large herds of cattle and sheep.

Damaras.

The southern part of the colony is known as Namaland (nä'mä-lănd), and is inhabited chiefly by tribes of Namas, a species of Hottentots. The Namas are as ugly as any people we have yet seen. They are short in stature, gaunt, and angular. They have yellowish brown skins, high cheekbones, and pointed chins. Their noses are flat, their lips thick and protruding, and their ears large and almost without lobes. Their language sounds to us like the cackling of geese; it consists of a succession of clicks.

These people are clad in sheepskins. They wear the wool outside in the summer and turned inward in the winter. Some also have aprons to which glass beads are attached, and which reach to the knees. They smear their bodies with rancid grease.

The Namas are divided into many small, independent

tribes, each ruled by its chief. They live in villages of beehive-shaped huts. Sometimes a village has ten huts, and sometimes more than a hundred. The huts are so low that a grown man can not stand upright in them. Each is formed by a framework of branches tied together in the shape of an inverted bowl, with matting stretched over it. There is a little door at one side through which the people crawl in. Sometimes as many as twelve live in one hut, keeping everything dirty in the extreme. The huts are usually built close to one another, in a circle, with their doors at the back. The space within the ring of huts is used for the cattle at night.

One would not suppose that the Germans could make much of such a country and people, and so far they have not been able to do so. In total area, German Southwest Africa is about eight times as great as Ohio; its native population is small, and it has but few whites. There are several thousand Germans and some English and Boers who have settled in the colony to raise cattle, to trade, or to prospect for mines; but there are no towns of any importance, and the country is far different from Cape Colony, which we have just left.

A little railroad has been built across the British possession from Walfish Bay into the interior, and the Germans have a railroad to Windhoek (vĭnt'ho͝ok), the capital, which lies two hundred and thirty-five miles from Swakopmund, where we now are. They have a small military force there, and have established several government schools. There are also some mission schools; but altogether the colony is backward. It has no trade to speak of, and is of little importance to the commerce of the world.

50. ANGOLA, OR PORTUGUESE WEST AFRICA

WE have left Swakopmund and German Southwest Africa, and are now traveling along the coast of Angola, the Portuguese colony. The land grows more fertile as we sail northward. The coastal plain is green, and the mountains behind it are heavily wooded.

Angola stretches along the Atlantic Ocean from the Kunene River to the mouth of the Kongo, a distance of about one thousand miles, and it goes so far inland that its area is equal to more than ten States as large as New York. Most of the country is composed of the high plateau back of the mountains. This is well watered. It has vast forests bound together with vines, and great plains covered with grass from five to twelve feet high.

The forests are much like those of the Kongo. They have oil palms, baobabs, and other tropical trees with beautiful blossoms. There are many orchids, and among the creepers are some with a sap from which rubber is made. The rubber creeper has a yellow fruit as large around as an orange, with a pulp which tastes somewhat like a lemon. If any part of this creeper is cut, a milky juice will ooze out and harden upon exposure to the air. It is about the most important product of Angola, furnishing one of the rubbers of commerce.

The grass of the Angola plains is like that through which we traveled in our excursions along the banks of the Kongo. It is from five to fifteen feet high, and has blades as sharp as a knife. Paths have to be cut through it in order to cross the plains; and the grass is so high

it shuts out the wind and makes traveling hot work. When the grass is dry the natives often set fire to it. Then the whole plain is flame-covered, and sparks by thousands shoot up above the wall of fire. At the same time the grass stems burst with a sound like myriads of pistol shots. Such a fire roasts the rats, mice, snakes, and other animals which live in the grass; and it is always followed by a great flock of birds which swoop down upon the black plain to eat the dead animals.

The forests and jungle never burn. They are the refuge of antelopes, elephants, hippopotamuses, buffaloes; and even lions and leopards are to be found in them.

Angola is far more thickly peopled than German Southwest Africa. It has numerous tribes of Bantus, much like those we saw on the Kongo. Each has its own chief, and the different tribes are often at war with one another. There are but few whites except at the ports and at the trading stations in the interior, and the most of the country is altogether wild and unexplored.

We first call at Mossamedes (mŏs-sä′mā-dĕs), the chief port of southern Angola. It lies about two hundred miles north of the Kunene River, in a region of good grazing lands. The natives have goats, sheep, and cattle; and, strange to say, they train their cattle as riding animals. We each hire an ox for a jaunt into the country during the stay of the steamer. Our saddles are well-padded leather cushions with stirrups attached, and our bridles are each a pair of reins fastened to a round iron bar thrust through a hole in the animal's nose. The oxen trot easily, and we find we can guide them in this way as well as though they were trained horses, and we had the ordinary bridle and bit.

Going northward, we next stop at Benguela (bĕn-gā′là), a thriving settlement situated on a level plain near the sea, with green hills a few miles behind it. The town has several fine squares, some factories, and good houses and stores. Caravans of natives are always coming in or going out, bringing the products of the interior, and taking back foreign goods, including gay calicoes, beads, guns, powder, tobacco, and other things in exchange.

Native of Benguela.

At the factories we see great quantities of rubber, coffee, palm nuts, and palm oil, as well as ivory tusks and balls of beeswax which have just come in. Some of the tusks are so large that the natives make a framework of wood in order that they may rest more easily on their shoulders while carrying them.

The beeswax is taken from both wild and tame bees. Some of these people are excellent bee keepers. They make hives of sections of a limb of the baobab tree, scooping out the inside and fastening up the ends with boards and clay, but leaving little holes for the bees to come in and out. Such hives are fastened in the branches of low trees, and thatched with grass to keep off the rain. The

honey and wax are taken out every year, a little being left so that the bees will not go away.

While we wait at Benguela we have a chance to visit the native villages near by. They are made of rude huts of wicker and mud with roofs of grass thatch. The doors are so low we have to stoop to go in; the floors are the ground, and about the only furniture is a low bed of sticks or palm leaves with a sleeping mat on it. Sometimes there is a pillow of matting, stuffed with wild cotton, or perhaps a wooden pillow three or four inches high. Many of the people sleep without pillows, resting their heads upon one arm. Some sleep on the floor.

There are little gardens about the huts, and in them we see women hoeing. The women here, as in most parts of Africa, do the hard work. They dig the ground with little hoes, which have iron blades like a large oyster shell and wooden handles about eight inches long. They plant Indian corn, mandioca, red peppers, and other things, and harvest them when ripe.

The native men are often mechanics, working in iron and wood. They make canoes, build huts, and go hunting and fishing. They are also porters, carrying goods over the country.

The natives of Angola dress much the same as in parts of the Kongo valley. Near the coast the men have waist cloths which reach to their knees, being tied about the body with a strip of red cloth. The women wear but little more, and the children go naked. Both sexes have odd ways of dressing the hair; and many of the women wear heavy rings of iron, brass, or tin about their ankles or wrists. A woman will sometimes carry fourteen pounds

of iron upon her naked feet. The bands are fixed on by a blacksmith; they are often so thick that the wearer has to tie rags about them to protect her skin from injury until it is hardened.

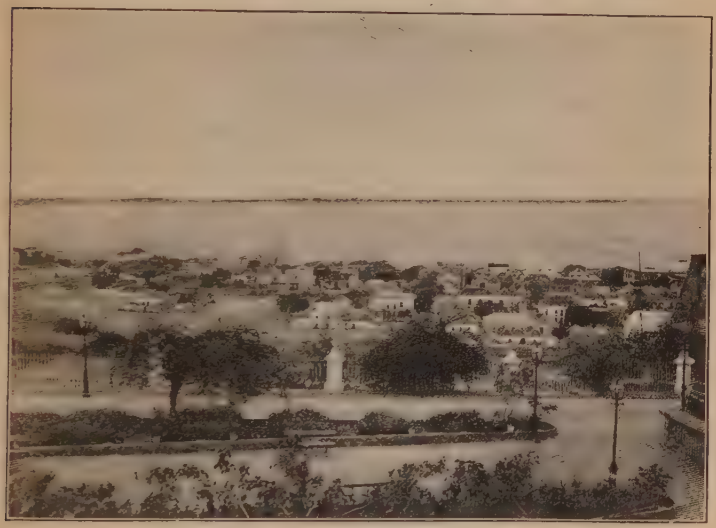
We are frequently asked to smoke or snuff during our stay with the natives. Almost every one uses snuff. He pours about a teaspoonful of the powdered tobacco into the palm of his hand, and thrusting his nose down into the mixture draws in all he can. We each try a small pinch, and nearly sneeze our heads off; for they have added red pepper to the snuff to make it stronger. At first we think this a trick, but learn that they like snuff better that way.

Returning to the steamer, we go along the coast northward to Loanda (Lō-än'dà), the capital of the colony and one of the oldest towns of western Africa. It was founded in 1575, and was for a long time one of the chief seats of the slave trade with Brazil and Cuba, as many as one hundred thousand slaves having been exported in a year.

When the slave trade stopped, Loanda lost its importance, but it has recently grown by its exports of native products, and is now said to be the finest city of western Africa. Coffee and sugar plantations have been set out in the country behind, and coffee has become a staple export. A railroad has been built several hundred miles into the interior, and upon it and the Kuanza (Kwän'zà) River, which is not far south of the port, great quantities of rubber, wax, palm oil, hides, cotton, ivory, and peanuts are brought here for shipment to Europe.

The Kuanza is the chief river of Angola, and it forms one of the highways to the interior, although it has many

rapids and is navigable for short distances only. We travel inland, and stop awhile at Novo Redondo, at the head of navigation of the Kuanza, some distance back from the coast. The town is a thriving trading center. It has macadamized streets, lined with acacia trees. On nearly all the corners are the shops of the traders; and we



"We go along the coast . . . to Loanda, . . ."

see caravans of porters coming in with loads of native goods on their shoulders.

On our way back to Loanda we make several excursions through the country, riding in hammocks slung to poles, which rest on the shoulders of men. Our porters go on the trot, and although they jolt us at first, we soon become so used to the motion that we frequently drop off to sleep.

Four lines of ocean steamers call regularly at Loanda. Upon our return, we find one belonging to the British Navigation Company at anchor in the harbor. It is to sail within a few hours, and as we have now completed our tour of the African continent, we shall take passage upon it for Liverpool.

While waiting, we call a machilla and take a ride through Loanda. The town has only a few thousand Europeans, but many more natives. We visit the stores in the lower part along the bay, spend a short time in the markets, buying a few curios to take home to our friends, and then call upon the governor and other officials in the residence part of the city, which lies on the hill farther back.

The steamboat whistles as we leave the governor's house, and we go down to the wharf and hurry on board. Our baggage has already been packed away in the hold, and a little later we are steaming outward on our long voyage home. We call at the Cape Verde Islands, the Canaries, and Madeiras (Mȧ-dē'rȧs), and then sail on northward to Liverpool, from where a fast ocean liner, in six days, takes us across the Atlantic, home to New York.

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